Vol 4 No 1 January

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The Australian COMMODORE REVIEW

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The Independent Australian Magazine

Latest BBS and User Group listings
Guide to Commodore Public Access Systems

WIN A FAMILY PACK
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Game Reviews:
FLASH GORDON
XENO
BMX

Review of Pocket Planner

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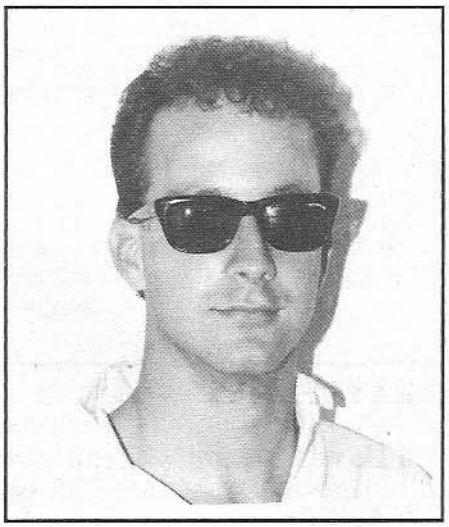

Andrew Farrell

Hatching new born chickens is not unlike the process of providing guidance to new computer users. It's a cumbersome task that sometimes leaves the blind and helpless young stumbling toward impending danger. This issue we provide a cushion to ease the impact of entering into computing.

You'll find a Public Access Message System listing, a User Group Guide and an introduction to some of the specialist Commodore 64 BBS's around. There's a swag of programs for MPS-802 owners trying to get hi-res graphics and something not unlike a Fairlight for music lovers reviewed by one of our new columnists.

J Mark Hunter is back from Switzerland where he has been sunning his pale complexion on one of their famous beaches. He returns in his usual flippant style to take further tounge in cheek views of the latest video games.

Michael Spiteri continues Adventurer's Realm whilst the back pages are now filled with programs for you to type in. You will continue to see more programs in coming issues as we increase this section and try to focus a little more on that aspect of computing.

Phil Campbell has still got his hands full reviewing new wordprocessors. This issue he takes a look at one of the companions to *Pocket Writer,* namely, *Pocket Planner.*

A little known fact is that this man works for the DMR, whose entire traffic system is now operated by a Vic 20. Garbage collects have caused several major traffic jams in the past two weeks, however the real crunch came when the 1541 head went out of alignment and the software read the settings for morning peak hour instead of afternoon, sending the Sydney Harbour Bridge into a state of chaos.

In other news today, Stephen Gordon, our Amiga columnist and keyboard player extraordinare, lost part of his column at the last knock when his Amiga Sidekick crashed. Please keep this in mind when reading the one page review in this issue. The rest of the column will appear next month.

Until then, may the bugs bed elsewhere.

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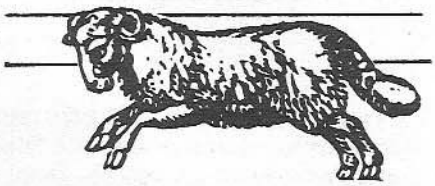
RAM RUMBLINGS



LOTTOCHECK

Lottocheck is where the computer game and serious computing meet. Developed by database and graphics experts, *Lottocheck* uses a database of all past GoLotto draws (over 6 years worth! included on a free data disk) to which you add new draws. *Lottocheck* is only usable for GoLotto (NSW). An extensive handbook which covers winning strategies and maths theory of lotto, is included.

Using the PRIZES option, you may enter between 6 and 15 numbers of your choice and *Lottocheck* does one pass through the entire database, totalling all prizes in each division that these numbers would have won if used over the 6+ year life of GoLotto. As it steps through the data, each draw is graphically displayed on the screen in a coupon-like image, a square is drawn around each of your chosen numbers while the actually winning numbers are highlighted.

The GRAPH option produces a histogram of the current frequencies of all 40 numbers.

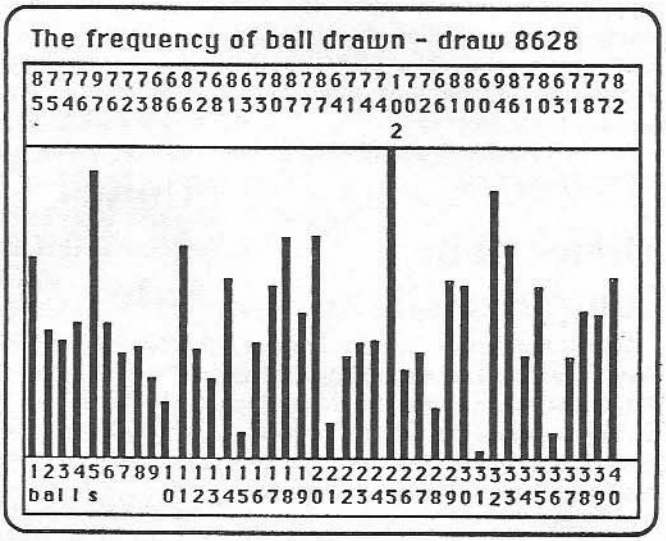
A RANDOM option asks you whether you want between 6 and 15 random numbers, then displays them to you in the form of bouncing coloured balls.

EVALUATE lets you evaluate theories on prediction of winning numbers using Rankings of all balls from 1 to 40. This option steps through the database as with *prizes*.

Additional options let you list or print sections of the database, and standard database abilities like ADD, INSERT, MODIFY and DELETE are all created for via professional form-like input screens that simplify data handling and minimise the chance of error by automatically doing *type* and *range* check - supplemented with help mesages appearing on the screen in the *status* box as needed.

Priced at $149.50 *Lottocheck* could be your ticket to a big win soon. Enquiries should be directed to Solid Software, PO Box 218, Belgrave Vic 3160.

Full review in our next issue.



Graph option - histogram of frequencies of balls drawn.

New PC Wordprocessor

Tasword PC, a sophisticated word processor for the IBM compatible machine, has been released in Australia.

The *Tasword* word processors (from Tasman Software) for other computers have been very successful worldwide. In particular sales of *Tasword* word processors for the Amstrad range of computers have been in the thousands for Australia alone.

Tasword are renowned for their advanced features and speed, combined with ease of operation and understanding. The features include comprehensive cursor movement control, maximum use of available text memory, on-screen formatting, horizontal scrolling, comprehensive "help" pages, delete (character, word, line, paragraph, block), insert (character, line, auto), tab, ruler, search/replace, flex comprehensive and easily customised print commands, data merge, program customisation, tutor program, and much more.

Rumours

Continuing the theme of last month's unsubstantiated rumours about the new improved Amiga, we have some slightly more substantial rumours. Three new versions will be available. Whether these can be called improvements on the existing Amiga I am not sure, but you can judge.

No 1 will be a 2000 series with one megabyte of memory on board. Sidecar will be built in and have an additional 640K of dedicated RAM (total 1640K RAM). A further block of RAM will be dedicated to the sound chips (like the Apple IIGS). This little package will go for $3000 plus without monitor.

A second version called the 2000 Turbo will have a 68020 processor. The third will be a version called the B52. It will be a 256K version without bells and whistles, monitor, etc, will plug into your TV, and retail for $1000 plus.

On the vapourware front or just out of that category is the news that a small R&D firm in Germany are working on a 256K non-volatile RAM disk with battery backup that fits inside the Commodore 64. Programs loaded into 64 memory can then be uploaded into this RAM disk and will remain there when the system is switched off. The advantages for businesses that use protected software are obvious. Please keep in mind that as this is only in the R&D stage it might be many months before we see it.

Tasword PC at $79.95 retail represents exceptional value for a totally professional word processor. Dolphin Computer, the national distributor, can provide a demonstration disk for only $5.00 which includes a $2.50 rebate coupon for subsequent mail order purchase of the program.

For further information call Arna Gillott (02) 438 4933.

Aliens: The Computer Game

With Activision Entertainment's *Aliens: The Computer Game,* Commodore 64/128 users can relive the thriller that has terrified more than 25 million movie-goers since *Aliens* was released by Twentieth Century Fox Film Corporation this summer.

Aliens: The Computer Game vividly recreates all of the elements that made the motion picture such a success. After your harrowing flight to the surface of LV-426, Alien attackers come at you from all sides. From the dark pathways of the Atmosphere Processor, through the breached Operations Room, to the final confrontation with the Alien Queen, your life and the lives of the Colonial Marines depend on your trained reaction to danger.

Simulating the movie's struggle against mankind's ultimate foe, *Aliens: The Computer Game* features six game segments which tie closely to the movie's storyline and action, permitting the player to experience the following in first-person:

* Navigating the Drop-Ship landing from the military transport onto the surface of LV-426.

* Rescuing your Marines who are under attack in the depths of the Atmosphere Processor, controlling their movements and scanning their condition via bio-monitors.

* Fending off wave after wave of Aliens while your squad attempts to escape from the breached Operations Room.

* Rescuing Newt and destroying the Alien nest before the nuclear reactor vaporizes the planet.

* Combating the Alien Queen.

Aliens: The Computer Game was created by a team of designers lead by Steve Cartwright, creator of bestselling software *Hacker* and *Hacker II.*

Aliens: The Computer Game is available for a recommended retail price of $39 disk and $29 cassette, from Imagineering, (02) 662 4499.

United Computers 48 hour marathon sale

Sydney computer dealer, United Computers recently held a 48 hour sale that lasted from 6.00pm Friday evening till 6.00pm the following Sunday. Although few sales were made at the wee hours of the morning, for which the shop was open, many Amigas and Family Packs were passed on to happy buyers at lighter hours of the day.

Of special interest was a large assortment of Vic 20 programs, peripherals and cartridges that are still available at very low prices. Virtually nobody else is providing support for the Vic 20, despite the huge number of enquiries made for products on a daily basis. Items available include memory expansion, programming aids and utilities, software (business and games), and many cartridge programs.

Commodore PLUS/4 and Commodore 16 gear is also available. Interested persons should call on (02) 295088.

Amiga Commodore 64 compatibility

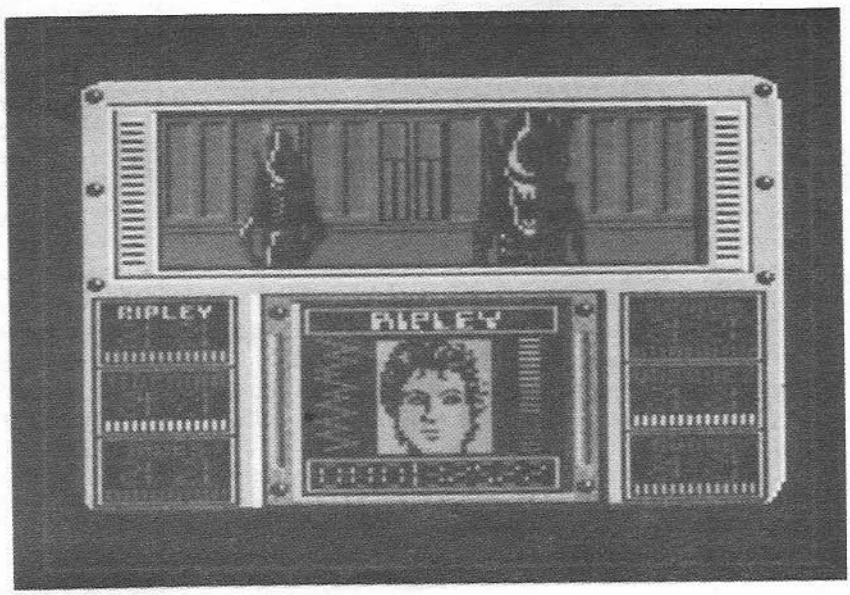
In a few months we may see the Amiga running humble Commodore 64 software following stories of a software package that provides full compatibility with this 5,000,000 plus seller.

Various other machines are also likely to be emulated before the end of the year including the Apple Macintosh, Atari 520ST and IBM PC - all by use of software. We wait with baited breath.

Disk Magazine Number Five

Yes, our fifth disk magazine is available. On it you will find some smashing programs from the UK. Downloaded from Compunet, with graphics and sound to blow your socks off and keep them off, the Number Five Disk is worth investing in.

News is that crews of hackers are racing each other to produce bigger, better and brighter graphics and music. However, rumour also has it that their primary concern in many cases is that of piracy. Neverthless, some very impressive stuff. Order now by calling (02) 398 5111 and pay by Bankcard. Now in stock.



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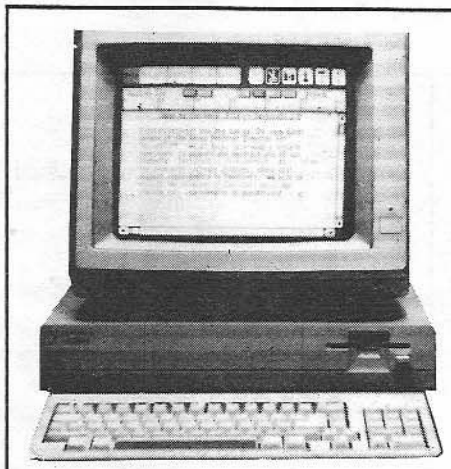

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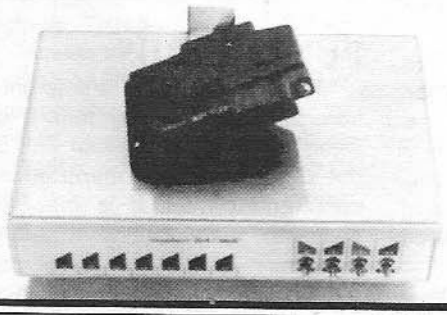

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Have Modem, will Call

Since the inception of Viatel - Telecom's own Videotext System - there has been a huge boom in Telecomputing. However it is not only Viatel that has enjoyed the fruits of this boom, as our modem specialist ***Phillip Dean*** *quickly discovered.*

Local Bulletin Board Systems (BBS) are on the up. So much in fact, that amongst home users, the BBS's are far more popular than Viatel.

This popularity has seen the number of bulletin boards in Sydney grow from two or three in June of 1985 to about 20 systems now (these figures being for Commodore dedicated systems, obviously there are many other systems for other computers - see National PAMS directory in this issue).

The reasons for the popularity are relatively simply. Firstly they are very cheap to access, some being free, others charging only a nominal yearly fee. The equipment needed by the users to access the boards is also very inexpensive.

Most Bulletin Boards run at 300 baud, while Viatel runs at 1200/75. The cost of a 300 baud modem can be as low as $60 while most modems needed to access Viatel cost at least $199. Therefore the obvious economic benefits have made Bulletin Boards very popular in comparison to Viatel.

Of the Commodore boards there are two distinct types, the Standard Ascii, Full Duplex systems, and the CBM Ascii, Half Duplex systems. Those which run using CBM ascii, are Commodore only systems, and take advantage of the colour and graphics of the 64, and even sound. The standard ascii systems use the industry standard character (ascii) set, and therefore can be accessed by any type of computer.

Of the 28 or so Commodore boards running in Australia, a number of them use the same software. There are three major bulletin board programs for the Commodore widely used today, with a few more just coming on the market. The three most common are KBBS, COMboard and the PUNTER BBS, others available, or soon to be released include the RCOM software, and EAGLE-BOARD.

Funnily enough, the three major ones were all written by Canadians, KBBS and COMboard by Kris Hatlelid, and the Punter BBS by Steve Punter. The other two mentioned were written by local BBS sysops who wanted to design their own BBS software, to their own personal liking. This trend is developing rapidly as many sysops are keen to have an individual system, designed to their own specifications and desires.

Now we will take a more in depth look at these programs.

COMboard

This was the the first BBS program to achieve huge popularity. Designed by Canadian Kris Hatlelid, it virtually dominated the Sydney BBS scene for most of last year.

COMboard Bulletin Boards are Full Duplex, Standard Ascii systems, and therefore accessible to anyone. The software is very 'user-friendly' both for the board users and the sysop. The system is all menu driven, making it very easy to move around the system. The software is reasonably flexible, and allows for any combination of disk drives to be used.

The system allows for nine mailboards, each being defined by sysop (name, length etc.). The security level for each user is set, by defining which functions/mailboards the user has access to, thus providing almost infinite security levels.

COMboard systems use the XMODEM protocol for file transfers, (they also have Punter, but the Punter protocol never worked fully in COMboards).

Here is a look at the main menu from a COMboard system, Gary Edwards COMboard 068 BBS (Ph: (068) 47-1197).

```
# COMMBOARD 068 Commands
-----------------------------------
<B>ulletins      <C>hange password
<D>ownloads      <E>mail
<F>eedback       <G>ood bye
<H>elp!          <L>og of users
<M>agazine       <O>ther bbs numbers
<P>age operator
<R>emote program access
<T>ime/Date      <U>ploads
<X>pert level    <Y>things work


 [ MAIN ]
<B,C,D,E,F,G,H,L,M,O,P,R,T,U,X,Y,?>]
```

Accessing any of the functions is via a simple keystroke (plus return). You are then taken to the menu of that function and so it continues. By simply following the menus you can move anywhere you have access to.

PUNTER BBS

The Punter BBS is a different set up from the COMboard system. It too runs using Standard Ascii, and Full Duplex, but instead of being menu driven, it is command driven. It is also a single mailboard system, rather than a multiple mailboard system like COMboard and others. The use of commands requires a bit more knowledge of the system, but provides direct movement around the system.

The Punter software is very flexible in drive configuration allowing any combination of drives, but basically there aren't too many changes you can make from the standard configuration. All transfers are via the Punter protocol (Steve Punter was the one who designed the Punter Protocol).

One example of the Punter BBS is Steve Sharp's Palantir (Ph: (02) 451-6576).

RCOM SOFTWARE

The RCOM software is an example of a Commodore only system. It uses CBM Ascii and Half Duplex. Because it uses CBM Ascii, only a Commodore can logon, using a special terminal program. The feature of using CBM Ascii is that it allows for the use of the inbuilt colour and graphics of the Commodore. In fact the system was designed solely to take full advantage of the 64's capabilities.

The board also takes advantage of the 64's sound capabilities. With the use of the right terminal program (Ultraterm) you can write a sixteen note tune and send it to the board inside your messages, and then when the message is read by another user the tune is sent to him and replayed as the message is read.

Rcom, like the Punter Software, works on the single mailboard system, but is like the COMboard setup in that it is all MENU driven, making it very user-friendly. All file transfers are via the MIDWESTERM protocol, and it is recommended that you use Ultraterm for your terminal program.

At this stage it is the only board running under this software, although I believe the software is open for sale.

Here is a look at the main menu from the RCOM BBS (Ph: (02) 667-1930).

RCOM MAIN MENU

02:43 PM 39 MINS REMAINING
(R)EGISTRATION INFORMATION
(I)NFORMATION
(W)HAT'S NEW? - UPDATED 2 JAN
(P)ERIPHERAL - RCOM MAGAZINE
(C)HAT WITH SYSOP
(B)ULLETIN BOARD
(M)ESSAGE TO THE SYSOP
U(S)ER GROUP INFORMATION
(O)THER MISC FUNCTIONS
(F)ILE TRANSFER LIBRARY
(E)LECTRONIC SHOPPING
(H)OW TO USE THIS BBS
(U)LTRA-TERM INSTRUCTIONS
(T)ODAYS RCOM USERS
(Y)ESTERDAYS RCOM USERS
(^) LOG OFF
>

On the board you will notice that all this menu is in colour, as with the rest of the system.

EAGLE-BOARD

(I must inform you that the author of Eagle-Board, Philip Dean, and the author of this article, Philip Dean, are one and the same and so if this paragraph sounds a little biased, then it probably is - ED.)

Eagle-Board was written to try and combine the best features of all the different Bulletin Board Programs. It combines the user-friendliness of COMboard and RCOM through a fully menu driven design, but also the speed and ease of use of the Punter BBS, with a full set of commands that can be entered from any menu, to take you anywhere throughout the system.

It runs under the multiple message system like COMboard with a maximum of 9 Public Mailboards, but unlike COMboard, it has a separate section for Private Mail, leaving the public boards truly public.

There are ten security levels for the board, defined mainly by the read/write security of each mailboard. The software uses the popular Xmodem & Punter protocols for file transfers. The true flexibility of the board is in the Menu Editor. The Menu Editor allows the sysop to edit any of the menus' text, and the letters needed to activate each function.

Therefore one sysop running the software could call the private mail section, PRIVATE MAIL and require the letter 'P' to be pressed to move to that section, while another could call it EMAIL and require an 'E' to be pressed to move to that section.

This allows each system to be somewhat individual, unlike COMboard. There are plans for even more extensive flexibility in the board configuration, allowing for every system using the software to become truly unique.

Here is an example of a possible Main Menu, this being from THE EAGLE'S NEST BBS (Ph: (02) 451-0535)

MAIN MENU
The Sysop is IN!
(B)ulletin Board
(C)hat With Sysop
(D)ownloads
(E)dit Password
(H)elp
(L)og Of Users
(M)essage to Sysop
(N)otices & Magazine
(O)nline Programs
(P)rivate Mail
(Q)uit - Logoff
(T)ime & Date
(U)ploads
(X)pert Level
(THE EAGLE)[93]-=>:

Like COMboard, it you need only press the letter in the brackets and return to move to the next function.

KBBS

This is the latest offering from Kris Hatlelid, author of COMboard, and is a major rewrite and upgrade of COMboard. KBBS is very similar to COMboard in its general structure, running under Standard Ascii, Full Duplex, being Menu Driven and working under the multiple board setup, with a maximum of 16 mailboards. It also contains numerous extra features not found in COMboard, including what are known as Universal commands, these are similar, in usage, to the commands found in EAGLE-BOARD.

The board's security levels are defined by what functions/mailboards the level has access too, just like COMboard, but there are only 16 such levels and users are assigned one of these, unlike in COMboard where every user can have an individual security level. The board uses both the Punter

and Xmodem protocols for file transfers and has the ability to run at 450 baud, even for users with only a 300 baud modem, but this also depends on the user's modem and terminal program.

The greatest feature of KBBS is its flexibility. Its flexibility far exceeds that of any other software available at this stage. While in EAGLE-BOARD you can edit the text of a menu, and the keystrokes needed to access the functions, in KBBS you can edit the whole system. There are 16 menus you can define, over 80 system functions that can be placed in any menu, and over 200 general strings that can be edited to say anything.

Of course some functions are obviously only going to be used in certain menus such as functions in the message editor. The security levels can be set so that some users with one security level, have one sort of Main Menu, while those of another level have a totally different Main Menu.

Here is one example of a Main Menu from Graham Lee's COMMODORE 64 KBBS (Ph: (02) 664-2334, The Original KBBS)

Commodore 64 KBBS Commands

```
[Online]->THE EAGLE
[B]BS membership  [C]hange
password
[D]ownloads       [E]lectronic mail
[F]eedback        [G]oodbye
[H]elp            [L]ist of users
[M]agazine        [O]ther BBS's
[P]age Sysop      [R]emote programs
[S]ystem info     [T]ime/date
[U]ploads         [X]pert level
[CALLS] Recent callers to system
[MOTD] Message Of The Day
[RATE] Change baud rate
```

Universal Commands (any menu)

```
[MAIL]      go to Email menu
[MAIN]      go to this menu
[BYE] or [OFF] log off of BBS
[ MAIN ](97)->
```

Now to show you how flexible the system is, here is the Main Menu from another KBBS, Bob James Phantomland KBBS (Ph: (02) 399-7716)

```
Welcome to PHANTOM LAND.
THE EAGLE at 03:15:17 PM
A-t log on & fees
B-ellow for sysop
C-hange password
D-ownload section
E-nter electronic mail section.
H-elp on the system
K-bbs systems
L-ist user max 165
M-agazine section
N-ews & info
O-ff (BYE)(OFF)
R-ate change 300 to 450 baud
S-ysop mail to bob
T-o days callers
U-p load section
X-pert level
[time remaining 29 min] [xpert # 0 ]
[security # 2 ]
[ MAIN ]2
```

As you can see the two look totally different, and you would almost think they were running two different types of software. Of course parts of the board remain constant for all systems, so you will always be able to tell it is a KBBS, but there is no denying its flexibility.

Perhaps the best way to describe KBBS is that it is a BBS CONSTRUCTION SET.

The only problem with the immense popularity of all these systems is that at times it can become very difficult to get onto some of the better known boards, that is why we have compiled what we believe to be the most comprehensive list of Commodore dedicated systems in Australia, so if one board is engaged, there is always plenty more to try.

Other Commodore Bulletin Board Systems

List Compiled by Philip Dean
11th December 1986
28 Systems Listed.

This list is as accurate as possible. If you know of any errors, or omissions, do not hesitate to let us

New South Wales Systems
- 18 Boards

Auzline BBS ..... (02) 688-1006
Hours: 10pm-5pm Mon-Fri,
10pm-8am Sat-Sun
Type : KBBS
Bauds: V21 - 300 Baud, 450 Baud
Xfers: Punter, Xmodem
Mem. : Free Access
Sysop: Chris Pattison
Suggested Terminal: VIP XL/ SUPERCOM XL

COMboard 068 ..... (068) 47-1197
Hours: 24 Hours
Type : COMboard
Bauds: V21 - 300 Baud
Xfers: Xmodem
Mem. : Free Access
Sysop: Gary Edwards
Suggested Terminal: VIP XL

Comet BBS ..... (02) 599-7342
Hours: 24 Hours
Type : CBM Ascii, Half Duplex System
Bauds: V21 - 300 Baud
Xfers: Midwesterm
Mem. : $25 p.a. Membership
Sysop: Eric Davis
Suggested Terminal: Ultraterm

Comm Link KBBS ..... (02) 875-4817
Hours: 24 Hours
Type : KBBS
Bauds: V21 - 300 Baud, 450 Baud
Xfers: Punter, Xmodem
Mem. : $15 p.a. Membership
Sysop: Michael Hayter
Suggested Terminal: VIP XL/ SUPERCOM XL

Commodore 64 KBBS. (02) 664-2334
Hours: 24 Hours
Type : KBBS
Bauds: V21 - 300 Baud, 450 Baud
Xfers: Punter, Xmodem
Mem. : $25 p.a. Membership
Sysop: Graham Lee
Suggested Terminal: VIP XL/ SUPERCOM XL

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"Freeze Frame MKII" must have been the **world's most powerful and most successful** backup product. The success of "Freeze Frame" spawned several imitators but they are pale imitations of, what we are convinced, is the **most advanced and easy to use backup product in the entire world.**

Now the **"MKIII" version** has moved "Freeze Frame" well ahead of the "opposition". As well as its unfailing skill in handling **every memory resident program** available for testing up to 1st July 1986 it will now transfer from tape to disc the vast majority of **programs that load subsequent parts.**

FEATURES

- TAPE TO DISC
- DISC TO DISC
- COMPLETELY SELF CONTAINED, NO EXTRA SOFTWARE NEEDED
- FILES COMPRESSED FOR ECONOMY OF STORAGE SPACE
- 128/128D COMPATIBLE IN 64 MODE
- TAPE TO TAPE
- DISC TO TAPE
- RELOAD INDEPENDENT OF THE CARTRIDGE
- NOW HANDLES PROGRAMS THAT LOAD EXTRA PARTS
- PROGRAMS RESTART FROM THE POINT BUTTON IS PRESSED

OPERATING "FREEZE FRAME"

"Freeze Frame" is **simplicity itself** to use. It is cartridge based so is simply plugged into the cartridge port. When the computer is switched on a message is displayed, pressing "RETURN" will clear the computer back to the normal start up screen. Software can now be loaded from tape or disc **completely as normal.** The latest version of "Freeze Frame" will to the best of our knowledge, allow **ANY software** to load and run normally (unlike competitive products).

"Freeze Frame" can be brought into operation at any convenient point by **pressing the button** on it. You can then do one of three things.

1. **Pressing "D" will save a working version of the program in memory to a formatted disc. This version will include an auto booting very high speed reload (many programs reload in less than 30 secs).**
2. **Pressing "S" will save to disc with a standard reload speed that can be used by non 1541/70/71 drives U.S. spec. machines, etc., but perhaps more importantly by most fast load cartridges and systems. Use "Dolphin DOS" to reload anything in less than 10 secs. (Also suitable for U.S. spec. machines.)**
3. **Pressing "T" will save a working version of the program in memory to tape. This incorporates a high speed reload at approx. 2400 baud.**

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Owners of earlier versions can return them and upgrade for $25 + PP.

SERIOUS WARNING: THIS IS AN EXTREMELY POWERFUL PRODUCT AND IS STRICTLY FOR PERSONAL USE. DON'T COMPARE IT WITH ANY OTHER PRODUCT, NOTHING ELSE OFFERS THE POWER OF "FREEZE FRAME".

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"EVESHAM 3 MINUTE NIBBLER" is the **latest version** of the infamous Evesham Nibbler - now boasting **even more power and speed. Will now copy even the most highly protected discs in 3-4 minutes.** Handles the latest types of disc protection **completely automatically.** This often involves the use of the **"PARAMETER COPIER"** which adds the vital secret code that the highly protected programs check for. (This is the important difference that makes this the best). At the time of going to press this program copied **virtually every disc program available for testing including the latest in games and business software.**

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"NOVA TRANSFER" will **transfer to disc** the latest Nova Load programs including **multi part loaders.** A very useful utility that also includes routines to transfer "Summer Games II" and "Beach-Head II" to disc.

"DISCO" will transfer standard speed load software to disc.

"TRANS QD" allows you to save a fast load system to your own discs.

"DOUBLE BACK UP" is a **very fast** two drive back up.

As well as these important newcomers all the old favourite utilities which have helped earn "Disector" such a large following are included. These include **Menu Maker (selective), Fast Format, Unscratch, Disc Monitor, Disc Orderly, Fast File Copy, Index, etc., etc.**

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Like everyone that has had the pleasure of seeing this system in operation you will be amazed by both the speed and ease of use. It is compatible with the majority of commercial software, speeding up both the program loading and SEQ/REL files.

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(These figures do not allow for searching)
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COMMUNICATIONS

Datacomm KBBS ..... (02) 643-1220
Hours: 24 Hours
Type : KBBS
Bauds: V21 - 300 Baud, 450 Baud
Xfers: Punter, Xmodem
Mem. : $20 p.a. Membership
Sysop: James Butler.
Suggested Terminal: VIP XL/SUPERCOM XL

Dreamtime FRP BBS ... (02) 93-5225
Hours: 9.30 pm - 7.30 am
Type : Fantasy Role Playing BBS
Bauds: V21 - 300 Baud
Xfers: N/A
Mem. : Free Access
Sysop: Chris Geddes
Suggested Terminal: VIP XL

Edge of Darkness .... (02) 522-7919
Hours: 7.30pm to 3.00pm
Type : KBBS
Bauds: V21 - 300 Baud, 450 Baud
Xfers: Punter, Xmodem
Mem. : Free Access
Sysop: Andrew Levell
Suggested Terminal: VIP XL/SUPERCOM XL

Illawarra BBS ..... (042) 84-4354
Hours: 24 Hours
Type : COMboard
Bauds: V21 - 300 Baud
Xfers: Xmodem
Mem. : Free Access
Sysop: John Simon
Suggested Terminal: VIP XL

Manly BBS ..... (02) 977-6820
Hours: 24 Hours
Type : CBM Ascii, Half Duplex System.
Bauds: V21 - 300 Baud
Xfers: Midwesterm
Mem. : Free Access
Sysop: Chris Patten
Suggested Terminal: Ultraterm

Mini-Net BBS ..... (054) 41-3013
Hours: 24 Hours
Type : COMboard
Bauds: V21 - 300 Baud
Xfers: Xmodem
Mem. : Free Access
Sysop: Mel Fields
Suggested Terminal: VIP XL

Palantir BBS ..... (02) 451-6576
Hours: 24 Hours
Type : Punter BBS - V64.4
Bauds: V21-300, V22-1200, V23-1200/75
Xfers: Punter
Mem. : Free Access
Sysop: Steve Sharp
Suggested Terminal: BOBSTERM/ SUPERCOM XL

Phantom Land KBBS . (02) 399-7716
Hours: 24 Hours
Type : KBBS
Bauds: V21 - 300 Baud, 450 Baud
Xfers: Punter, Xmodem
Mem. : Free Access
Sysop: Bob James
Suggested Terminal: VIP XL/SUPERCOM XL

Pursuit KBBS ..... (02) 522-9507
Hours: 24 Hours
Type : KBBS
Bauds: V21 - 300 Baud, 450 Baud
Xfers: Punter, Xmodem
Mem. : $20 p.a. Membership
Sysop: Warren Hillsdon
Suggested Terminal: VIP XL/SUPERCOM XL

Rcom BBS ..... (02) 667-1930
Hours: 24 Hours
Type : RCOM Software (CBM Ascii)
Bauds: V21 - 300 Baud
Xfers: Midwesterm
Mem. : $20 p.a. Membership
Sysop: Simon Finch & Ian Allen
Suggested Terminal: Ultraterm

The Eagle's Nest BBS (02) 451-0535
Hours: 24 Hours
Type : EAGLE-BOARD V2.0
Bauds: V21 - 300 Baud
Xfers: Punter, Xmodem
Mem. : $10pa Membership +$5 joining fee
Sysop: Philip Dean
Suggested Terminal: VIP XL/SUPERCOM XL

TreeTop BBS ..... (02) 949-5897
Hours: 9.00 pm - 7.30 am
Type : KBBS
Bauds: V21 - 300 Baud, 450 Baud
Xfers: Punter, Xmodem
Mem. : Free Access
Sysop: Daine Collier
Suggested Terminal: VIP XL/SUPERCOM XL

Twilight Zone BBS ... (046) 25-0309
Hours: 24 Hours
Type : COMboard
Bauds: V21 - 300 Baud
Xfers: Xmodem
Mem. : Free Access
Sysop: Peter Hewett
Suggested Terminal: VIP XL

Queensland Systems

- 4 Boards

C.C.U.G.Q. BBS ..... (07) 808-2125
Hours: 24 Hours
Type : COMboard
Bauds: V21 - 300 Baud
Xfers: Xmodem
Mem: $10 p.a (Must be member of CCUG)
Sysop: Ray King
Suggested Terminal: VIP XL

Connect 64 BBS ..... (07) 393-5352
Hours: 24 Hours
Type : Connect 64
Bauds: V21 - 300 Baud
Xfers: None As Yet
Mem. : Free Access
Sysop: Craig Upton
Suggested Terminal: VIP XL

Futex - C64 BBS ..... (07) 283-2034
Hours: 24 Hours
Type : Futex Corporation NSI Network
Bauds: V21 - 300 Baud
Xfers: None As Yet
Mem. : Free Access
Sysop: Paul Salanitri
Suggested Terminal: VIP XL

Hotline BBS ..... (07) 353-3718
Hours: 24 Hours
Type : Hex (Hotline Experimental)
Bauds: V21 - 300 Baud
Xfers: None As Yet
Mem. : Free Access
Sysop: Lionel Theunissian
Suggested Terminal: VIP XL

Victorian Systems
- 4 Boards

C-64 BBS (VIC) ..... (03) 489 4557
Hours: 24 Hours
Type : Standard Ascii, Full Duplex
Bauds: V21 - 300 Baud
Xfers: YAM - Ward Christianson
Mem. : $20/6 Mths
Sysop: Alan Miles
Suggested Terminal: VIP XL

Computer-Cations ... (03) 482-1271
Hours: 24 Hours
Type : KBBS
Bauds: V21 - 300 Baud, 450 Baud
Xfers: Punter, Xmodem
Mem. : Free Access
Sysop: Joshua Duffy
Suggested Terminal: VIP XL/SUPERCOM XL

Harbourd BBS ..... (03) 587-2504
Hours: 24 Hours
Type : COMboard
Bauds: V21 - 300 Baud
Xfers: Xmodem
Mem. : $10/year
Sysop: David Harbour
Suggested Terminal: VIP XL

Yarra Valley BBS .... (059) 64-3126
Hours: 24 Hours
Type : KBBS
Bauds: V21 - 300 Baud, 450 Baud
Xfers: Punter, Xmodem
Mem. : Free Access
Sysop: Frank Connor
Suggested Terminal: VIP XL/ SUPERCOM XL

A.C.T. Systems
- 1 Board

Canberra User Group (062) 54-7365
Hours: 24 Hours
Type : Punter BBS - V64.4
Bauds: V21 - 300 Baud
Xfers: Punter
Mem. : Free Access
Sysop: James Hacker
Suggested Terminal: BOBSTERM/ SUPERCOM XL

South Australian Systems
- 1 Board

SA Commodore BBS ..... (08) 371-0435
Hours: 24 Hours
Type : COMboard
Bauds: V21 - 300 Baud
Xfers: Xmodem
Mem. : Free Access
Sysop: Peter Hinton
Suggested Terminal: VIP XL

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Pocket Planner 128

- a spreadsheet that won't put a hole in your pocket!

by Phil Campbell

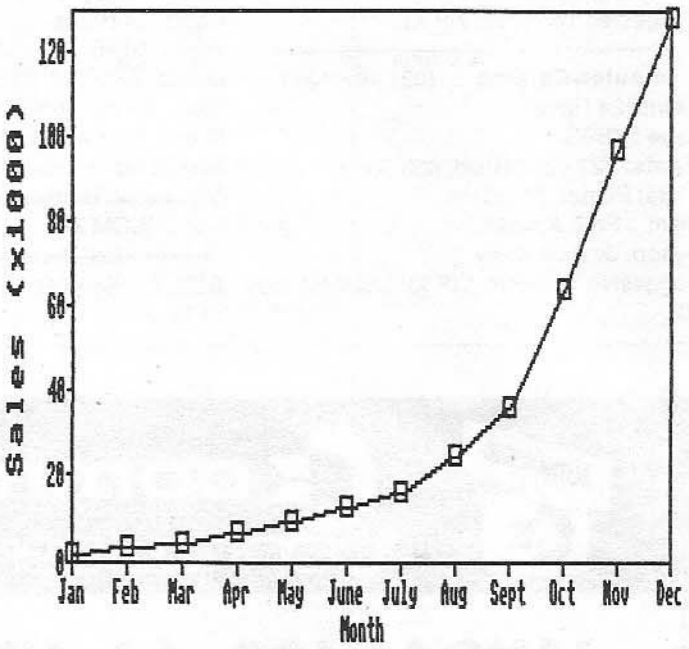
Distributed by Imagineering
Also available: *Paperback Planner 64*

Pocket Planner 128 maintains the high standard set by its stablemate *Pocket Writer*, reviewed in the October issue (under the name *Paperback Writer*). Due to legal difficulties, it seems that the names of all the C128 "Paperback" series have been changed to "Pocket", while C64 versions maintain the old titles. Confused? Me too!

In spite of all this, Pocket Software is fast gaining a reputation for its high quality and low prices. *Pocket Planner* is certainly no exception - it is a spreadsheet loaded with advanced features, including a powerful graphing option.

The program is file compatible with both *Pocket Writer* and *Pocket Filer,* and uses the same editing and control commands wherever possible. Thus, the Pocket series becomes a powerful suite of integrated business programs, with the ability to exchange information (and even graphs) with ease.

Learning to operate any of the programs is a breeze, thanks to the detailed on-screen HELP facility, and the simple and consistent command structure.



Australian Commodore Review - Projected Sales 1987

Planning with "Pocket"

Pocket Planner loads quickly, with auto-booting on the C128. This facility is not provided in the C64 version - amazingly, this is one of the few features that are not available. Most, if not all, the features detailed in this review, although referring to the C128 version of the program, are equally applicable to the C64.

When loading is complete, a printer file must be selected from the menu which appears on the screen. Many common printers are supported, although it may be necessary to re-configure a printer file to suit your own purposes. This is easy, although resaving the new printer file on the master disk has given me a few headaches.

Ignoring the warning which clearly said "DO NOT VALIDATE THE MASTER DISK", I did so - now I can't resave printer files on the disk. Mind you, I only validated the disk because my first effort to save the printer file resulted in a "Read Error" and a "*" file in the directory.

Another printer file problem arose with the line spacing on the Graph Print option. My Star printer was overlapping all graphics by one dot, a problem resolved by setting the line spacing at 9/72nds of an inch.

The spreadsheet appears on the screen as a grid - cell boundaries are actually shown as a fine line. This is helpful in aligning cells by eye, and thus in specifying cell co-ordinates. The grid can be toggled on and off, although I can see little reason to turn it off. Cells are identified by row/column co-ordinates - letters from A to IP identify the columns, and numbers 1 to 99 specify the rows. The top right cell is called A1, and the bottom right cell is IP99 - a total of almost 2500 cells.

Values, labels and formulae are entered on the input line at the top of the screen, and displayed in the cell which the cursor is currently highlighting. Long labels are easily entered by placing an ampersand (&) before the text, which then automatically spills across empty cells until an occupied cell is encountered. Formatting commands are available, which allow the contents of cells to be formatted in a number of ways - dollar formats for amounts and centring of text are two of the useful options.

Duplication, Range copy, Repeat Cell and Equivalent Copy functions all allow the replication of data and formulae in the sheet, although in a number of different ways. The equivalent copy, for example, provides an automatic offset for all cell references involved in formulae in a replicated range. This is a great time saver in sheets which involve a large degree of repetition with different sets of data - most do.

Functions

The *Pocket Planner* planner did not skimp on mathematical functions. Formulae of up to 200 characters can be entered in any cell, making use of all the normal mathematical operators together with trigonometric, statistical and logical funtions.

Columns and rows can be summed and averaged, minimum and maximum values can be found in a range, and occupied cells in a range can be counted to determine sample size. Logical AND, OR and NOT operators can be used in conditional statements which evaluate functions and take alternate actions depending on the result obtained.

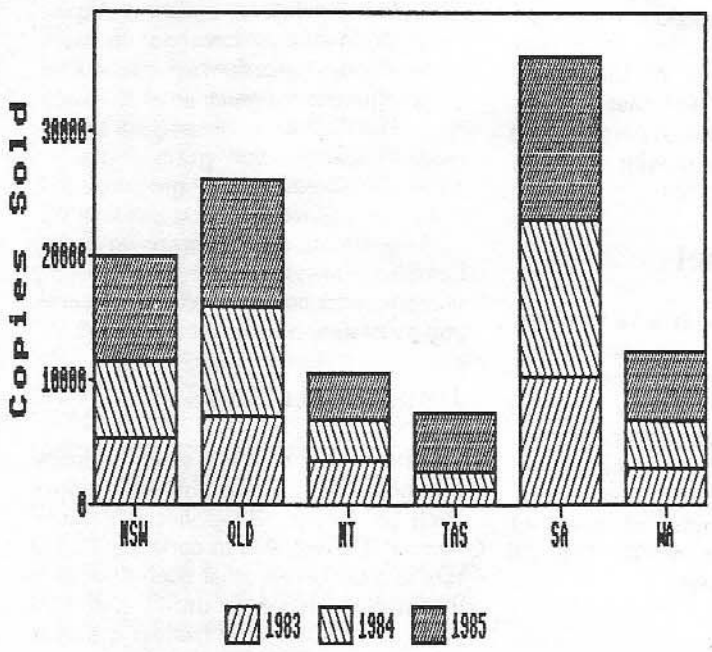
All in all, the functions offered by *Pocket Planner* are impressive and powerful.

Graphing

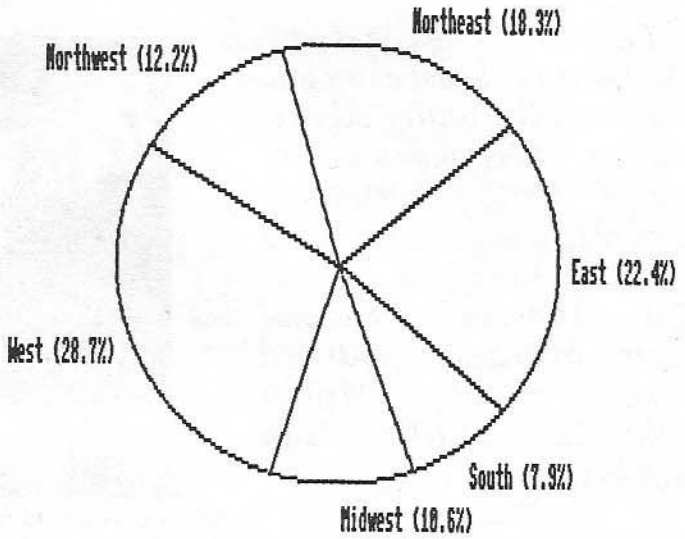
To me, the high point of *Pocket Planner* is the ability to graph data taken directly from a spreadsheet. Such abilities are quite unexpected in a sub $100 program, and in this case the functions are very neatly implemented.

Up to nine groups of values can be displayed, in any of four graph types - simple bars, stacked bars, lines and pies. Headings, descriptive text and labelled legends are added with ease, resulting in very professional looking graphs both on-screen and on paper. The screen display makes good use of High-res 80 column mode on the C128, an area in which the programmers from Digital Solutions seem to excel.

Graphs are drawn quickly, and are crystal clear. Scaling factors can be specified for both the screen display and printing, which allows the graphs to be displayed at whatever size you desire.



Australian Commodore Review Total Sales by Region



Australian Commodore Review 1985 Sales

Sample graphs are shown here - all my own work! It is really incredibly easy to produce such results, which to me look very professional. Just the thing to jazz up your school science project - or even your Uni Thesis.

Conclusion

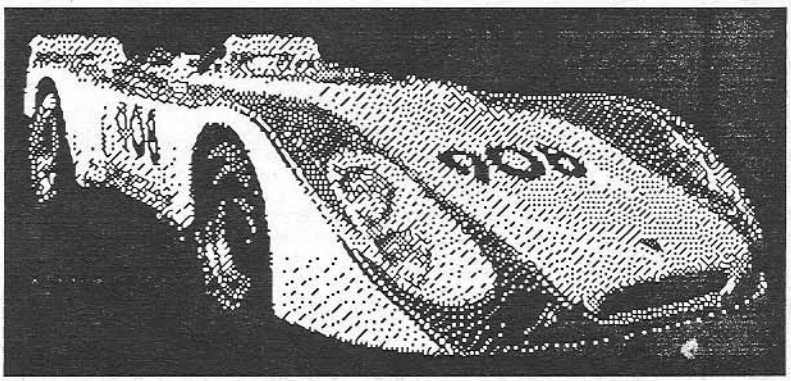
There is much more that I would like to say about *Pocket Planner,* although I have only spent a few days working with the program as yet. Mind you, I have been biased from the start by my positive impressions of *Pocket Writer* - with which I am writing this review. Pocket Software seems to keep coming up with little surprises - there is always one last Christmas present hidden in the pile of papers under the tree. For example, *Pocket Planner* can print sideways to allow the printing of extra wide spreadsheets.

How much would an IBM user pay for a special program to let him do that? Another point worth noting is the customer service provided by Digital Solutions in Canada, the originators of Pocket Software. They provide a cheap and reliable backup service for registered owners, and also allow upgrading to future versions of their products for a minimal fee.

All in all, *Pocket Planner* is another winner for Imagineering, and deserves a place in your software library. Next month I hope to have completed an in depth field trial of *Pocket Filer,* the third in the Pocket Trilogy - watch this space for further details.

Mega-Kernel - for serious trouble

The Mega Kernel by Caldax is the latest entry into the lucrative utility add-on market. Like many of the latest Utility products available now, it comes in the form of modified Kernel Rom. However this is not your average modified kernel, it is a MEGA KERNEL. ***Phillip Dean*** *checks it out.*



The Mega Kernel is not just one modified kernel, but four kernels in one, the standard kernel, and three specially designed utility kernels.

Kernel number one is the standard Commodore 64 kernel.

Kernel number two is a Kwik Kernel, with up to 600% speed improvements on load and save, as well as adding a full inbuilt dos wedge.

Kernel number three is a Monitor Kernel that has a full Machine Language Monitor with over 25 commands.

Kernel number four is an Imager Kernel that can give you an image or total copy of any part of RAM.

Kwik Kernel

The Kwik Kernel adds a number of extra facilities, mainly for the disk user. It speeds up loading and saving by up to 600%, without screen blanking. The new Kernel comes with an inbuilt dos wedge that replaces the need for 'OPEN 15,8,15,' with simply '@'. Therefore to initialise the disk drive, you need only send '@I' rather than 'OPEN 15,8,15,"I"'. As well as the dos wedge, it includes a few extra special features, these being:-

\ - SYS64738
^ - Un-New
# - Disables Head Bumps
! - Turbo Head Step

To facilitate these extra features, it was necessary to remove the code for the tape user, and the RS232 port (for modems).

The speed of the Kwik Kernel is a great improvement on normal 1541 speeds, however it does not quite come up to the speed of other turbo systems including Epyx Fastload and the Cockroach Turbo Rom.

Unfortunately the Kwik Kernel does not operate when a printer is also connected to the serial port, which can be quite a problem. Also it is not compatible with many of the latest protection schemes, and fast loaders found on many of the latest programs. It was even incompatible with the fast loader found on Isepic files.

Monitor Kernel

The Monitor Kernel is a very useful, fully fledged machine language monitor, complete with a full set of 25 commands. The monitor itself is the popular MICROMON for Compute Publications. From within Micromon you can Hunt, Transfer, Compare, Assemble, Disassemble any byte or area of memory, and much more. The 25 commands are as follows:-

A - Assemble
B - Break Point Set
C - Compare Memory
D - Disassemble
E - Exit to Basic
F - Fill Memory
G - Goto
H - Hunt
J - Jump
L - Load
M - Memory List
O - Branch Offset
R - Display Registers
S - Save Memory
T - Transfer Memory
W - Walk
X - Exit to Basic
" - Ascii Breakdown
- Decimal Breakdown
% - Binary Breakdown
& - Hexadecimal Sum
+ - Hex Addition
- - Hex Subtraction
> - Disk Directory

The Micromon is a very powerful, flexible, versatile, and user-friendly monitor, and contains all the features you could ever need in a monitor.

Imager Kernel

The Imager Kernel is similar to many products coming available these days such as *Isepic, Snapshot* or *Freeze Frame.* It allows you to copy any part of ram to disk. Unlike other such devices, it it totally invisible until activated (activation is done by flicking a switch before resetting the computer).

There are four types of imaging available, the first being Ram Imaging.

This option makes a complete copy of all the ram to disk.

The second is Cartridge Imaging, which will copy any cartridge to disk.

The third allows for the user to define the section of memory to be imaged by entering the start and end address of the block to be saved, so that you get exactly what you wanted.

The fourth is a very handy Hi-Res imager, which copies the contents of a Hi-Res screen to disk in a file which can then be re-loaded into various graphics packages such as *Doodle*, for editing.

Also contained in the package is a disk of public domain utilities to supplement the Mega Kernel. The disk includes a number of programs for use with the Imager Kernel, including CBACKER which will 'crack' a cartridge file so it will run from disk. Also a bootmaker which will create a boot program for any program you have IMAGED. Also included are the exact starting locations for a number of popular programs to assist you in creating a boot file for any IMAGE files of these programs.

The Manual provided is very comprehensive covering all aspects of the Mega Kernel well. There are numerous diagrams, and over two pages on exact installation instructions, so that is not a problem (unless you have soldered roms, instead of socketed roms).

The Monitor commands are all outlined, although there is little detailed explanation of each, while the instructions for using the Imager Kernel are more than adequate.

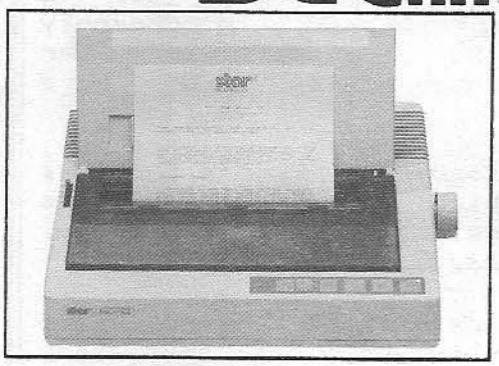
Overall the package is obviously a tool, and as the manual states, was designed by 'Hackers'. Of course the manual stresses it should only be used for Archival backups. For those not interested in its 'hacking' capabilities, it is includes a very useful machine code monitor, a handy utility for capturing Hi-Res files (the Hi-Res Imager) and a reasonable fastload system, although this has its drawbacks as mentioned above. Overall it is a good package, and at $99 it is quite cheap for the features available.

For someone interested in the combination of a fastload system and a machine code monitor, it is a very good package, especially with the extra IMAGING capabilities, however if you were looking for a just a good fastload system, you could probably find better elsewhere, with a product that has a better compatibility rate.

Ratings

Performance:	70	Ease of Use:	84
Features :	88	Value for Money:	86
Documentation:	80	Overall:	80

NEW Star NL-10 WITH PLUG-IN INTERFACES



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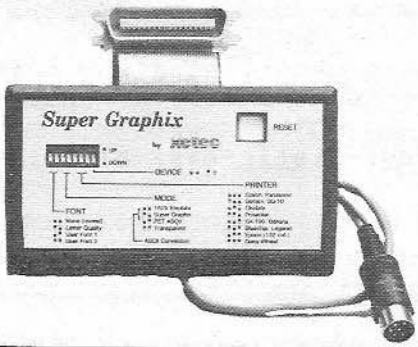

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A Printer Interface review by Eric Holroyd

If you use a non-Commodore printer with your 64 or 128 you'll need to use an interface unit to make everything work properly with the minimum of fuss.

I have a Star Gemini 10x printer which does all the Commodore graphics and characters and which I'd bought together with a Tronix/Cardco G+ interface. I'd used this combination for about a year before I became aware of the Xetec (it's pronounced zee-tech) Super Graphics Senior via magazine articles and reviews.

I found that the local agent, The Printer Specialists, of Gordon NSW, also handle several lines of printers plus peripherals like genuine ribbons for the Gemini 10x (and other printers) in both black and colours so we were off to a good start there as I'd had trouble locating the right ribbons.

I bought the interface by mail and it turned up within a couple of days, nicely packaged and with a good manual which was very easy-to-read and understand so I had the thing installed and working in no time flat.

With the Senior you get a disk of special fonts plus a loader program and a font-making program in case you wish to design your own type-face for special applications. There are 18 fonts and they're the same ones used by Xetec in their Fontmaster word-processing program. Using the loader program you can down-load any two of the fonts into the interface and call them up either in normal printing by using the easily accessed dip-switches or from within *Easy Script* and other word processors. It's all very easy to work out and use and I particularly like the "Correspondence Quality" font which is built into the unit and which I'm using to print this review.

This paragraph is in the normal dot matrix print which we're all so familiar with and which is a good fast printout is required. It's commonly referred to as "draft mode". Now we'll go back to Correspondence (or Near Letter) Quality. This is the thing you see in printer ads as "NLQ". Here we go.

The heading to this review is done in Manhattan font **and here's another example of Manhattan**. Good eh? The other font which I loaded into the interface before loading Easy Script for this session is called *Shadow*. *Here's a brief example of that one also. A good effect, eh?*

You can mix and match fonts,underlining and printing effects as and where you like, even in the middle of a word. Check this one out from Mary Poppins!

Super-cali-fragi-<u>listic</u>-expi-ali-**docious**..

On top of all this there's a built-in 8K printer buffer which lets your printer get on with the job quicker and returns control of your computer to you to get on with your job whilst it prints out the last one. Great when using *Print Shop* too as it cuts down on the "thinking & blinking" time.

I have no hesitation in recommending anyone to get this interface, at around $175 it's very good value for the job it does. There is a Junior model available which doesn't have the font down-loading capabilities but I didn't think the slightly cheaper price worthwhile if I couldn't have the fonts.

If all this has whetted your appetite for more info on this great product you can find out more about it from the suppliers: The Printer Specialists (02) 498 7541.

NOTE: Recommended retail price $189.

Cockroach Turbo-Rom & the Commodore 128

by Eric Holroyd

I finally gave in to temptation and got myself a 128D. It certainly is a great machine with a lot easier Basic than the 64 and has so many good features that I haven't yet begun to scratch the surface.

As you've probably read all about it in other reviews, you'll know that the 128 is really three machines in one.

Firstly, in 128 mode it's a great business machine for data-basing and word-processing etc, and you have to see *Superbase 128* in action to believe it! Its graphics, colours and music etc make it a great games machine too in 128 mode.

Secondly it will run a wide selection of CP/M software, a field about which I know absolutely nothing at this stage.

Last, but not least, it's a complete CBM 64 which is claimed by the makers to run all your existing 64 software, and it's in this mode that I struck a problem that I'd forgotten about. It's painfully s-l-o-w! I'd had the Cockroach Turbo-rom in my original 64 for so long that I'd forgotten what it was like to have to sit and read *War and Peace* whilst *Jumpman* loaded. Normal load takes 1 minute 40 seconds, Turbo-rom loads it in 17 seconds! *Pitstop II* takes 2 minutes 25 seconds, Turbo-rom does it in 30 seconds.

My 128D isn't slow in 64 mode any longer, I've got the Turbo-rom fitted now and I'm able to use the new computer just the same way as I'd got used to my trusty 64. All the "shorthand" commands of the built-in Wedge are there, plus screen-dump to printer with logo key/F7, fast disk format, change device number, fast save and verify, etc etc.

If you've bought a 128 and are disappointed with the slow 64 mode as I was you can get the Turbo-rom yourself for $42 including postage, and if you wish you can have customised screen colours and your own screen message for a further $5.

I've seen a Sydney-made pirate copy (shame on you for pirating local industry when the product is so reasonably-priced!) which had most of the original's features but which wouldn't load some things at all. If you're offered one of these things try loading Activision's *Music Studio ...*

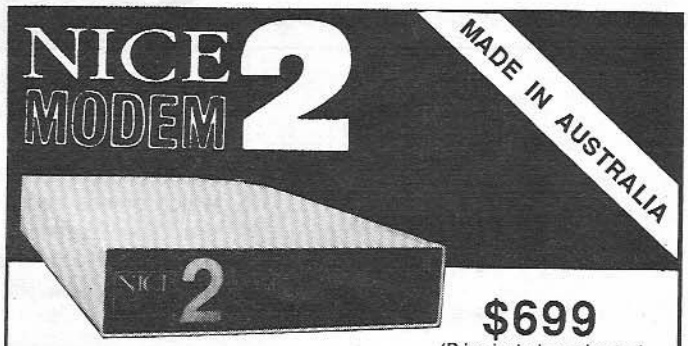
Finally, I'm not an agent for Cockroach Software and have no vested interests as you may think from my rave reviews. I'm just an eminently satisfied customer who's happy to buy Australian and would recommend anyone to Cockroach who wants high-quality accessories for Commodore 64/128/SX64 etc etc.

I used their excellent Turbo 64 Editor to make fast-loading disks before the Turbo-rom was introduced and also have one of their cooling fans atop my 1541 drives. This certainly keeps the drives cool and I feel it helps to prevent them going out of alignment.

The 1571 drive which I tried for a while before settling on the 128D (which has a built in fan to keep the entire works cool) tended to get very hot and if I was using the 128/1571 set-up I'd be getting a Cockroach fan for that too.

You can write to Cockroach Software, Box 1154, Southport, Qld 4215, or phone them on (075) 324 028 for further details.

Confirmed by an article by a Mr Vince Morton in Commodore Magazine, issue No 34, Vol 5 No 6.



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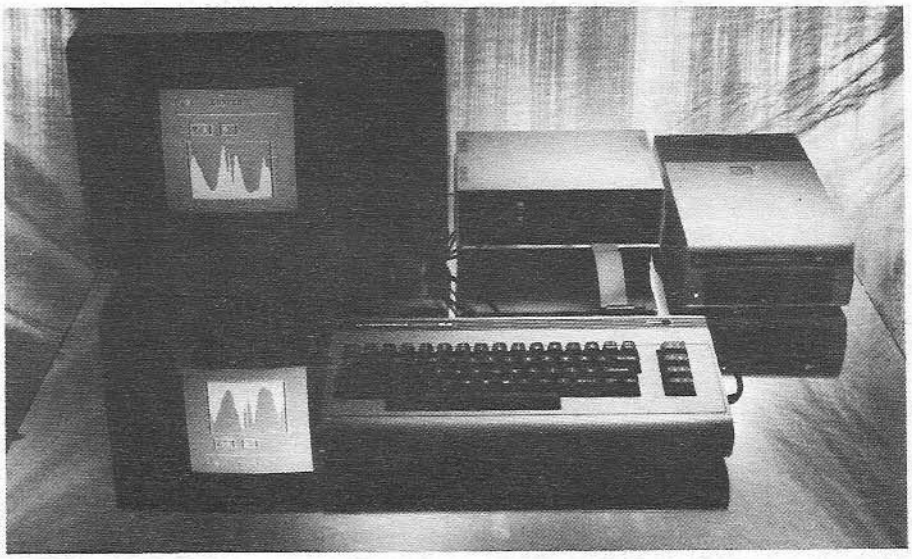
Waveshaper for Commodore 64

by Eric Holroyd



This is a very clever digital synthesizer with many features previously found only in the top recording studios. Sounds and music can be entered from a variety of sources and then replayed with changes to the "voices" by changing the waveforms and voice "shapes" in an endless pattern.

Waveshaper was my introduction to the world of synthesizers and although I am a working musician, playing trumpet and piano mostly, my music is more the good old time jazz and swing played largely acoustically and so I haven't had much contact with electronics in music except for the PA system and the mikes!

INDEX

1. MASTER SEQ
2. SEQUENCES
3. SHAPES
4. VOICES
5. FILES
6. EXPANSION

Hooking the unit up was simplicity itself, a plug in the 64's cartridge socket, a 12v power unit (supplied) into the back of the Waveshaper for its audio circuit and two leads with RCA plugs to my cassette deck/amplifier via the line-in sockets and I was able to load up the demos supplied on disk and be amazed at what came out of the speakers.

There's a nice demo of synthesized/sampled drum sounds which impressed me even more when I loaded up the graphics demo of a drum-kit playing in time to the sounds coming out of the speakers. Great stuff, and you can make your own screens to suit your music by using the Commodore graphics and screen editor. There's also a Kaleidoscope type of random graphics which pulses away in time to the music too. The Expansion software available with the unit needs to be loaded from disk for you to use the graphics and Midi capabilities.

The Waveshaper itself has three circuit boards, one for each of the two voices and one for sampling sounds. If you're a newcomer to all of this, as I am, you'll be pleased to know that all this means is that you can record **any** sound and then play around with it, altering its pitch or duration for use in other recordings etc.

Some marvellous sounds were on the sample disk I had with the trial unit, things like: water bubbling, glass bell, metallic keyboard, woman saying "yes" (???), xylophones, various keyboards and a super one called "weird" which made the Bach piece I entered into the Waveshaper sound fabulous and I think Johann Sebastian would have liked it himself!

P. 4 VOICES

V	VL	L
A	F	R
O	T	LOOP

SEGMENTS	TO
HRM	WSHP
AMP	ASHP

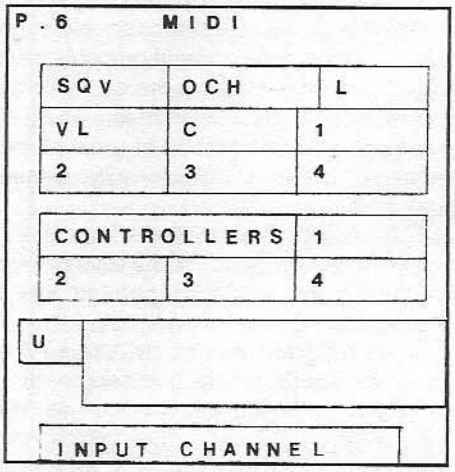
P. 6 GRAPHICS

MODE

IMAGE

SPACE

The front of the unit has two voice inputs from external sources, two voice outputs to go to your amplifier/mixing disk/cassette deck etc, two Pulse output sockets to trigger external equipment like drum machines or analog synthesizers etc. There's tape sync output to go to a tape recorder and a sync sample input, used for collecting sound samples as well as inputting an external sync clock. These are the features you'd need for multi-track recording.



The Waveshaper is equipped with Midi input which allows musical notes and other sound information to be fed in from other equipment, plus there are two Midi out sockets to connect to other gear to be controlled by the computer. Again, if you're a novice like me, you'll need to read the article explaining Midi in Volume 1 No 1 of *Home Computer GEM* (current issue available at your newsagent now folks! Ring (02) 398 5111 for back numbers.)

As I said, the unit has two voices of its own and with the addition of a keyboard synthesizer like the excellent Casio CZ101 you can get an extra four monophonic voices or one polyphonic voice (means you can play chords). If you hook up two external synthesizers you can, say the makers proudly, get up to six polyphonic voices at one time! You can in fact run almost any number of external synthesizers.

Being a musician I was naturally interested in the method of playing and entering music. It's quite easy really, you can either play it in real time direct from the keyboard or key in the notes by setting the octave before the note name. eg 7A 6C 7G etc. Either way you're creating a method to set the values for each note. Of course it takes a bit longer than sitting down at the piano to play, but now a non-musician would be able to enter and play music using this outfit. Very satisfying to the soul too!

The timing steps for music are represented by numbers, with 96 = whole note, 48 = half-note, 24 = quarter-note, 12 = eighth-note and so on (many European musicians would refer to those notes as: semi-breve, minim, crotchet, quaver etc).

I found that when entering my Bach chorale I could set a dotted half-note with a value of 72, a dotted note merely

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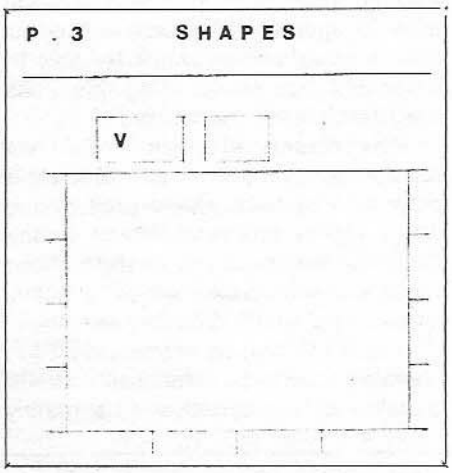
having half of its own value added to it (a bit like England's VAT) and I experimented a bit further and used 192 for a double-whole-note (or breve). The longest value I was able to use was 255. Triplets are no problem either, a half-note triplet would be three notes showing 16 16 16 because a triplet simply means three notes played in the time normally allotted to one, in this case 48. Simple.



Handy features include: Transposing ability up or down by a half-tone, ability to raise or lower a full sequence page by an octave, double or halve the timing in a whole page plus insert and delete at any point in a page.

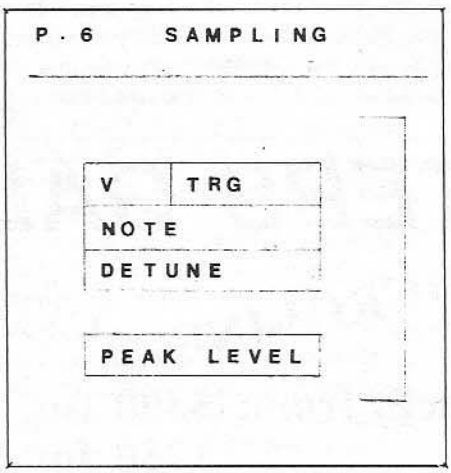
One of the best features is the ability to transfer an already written page to another page and then transpose it! Say you've written a page of boogie bass on the chord of C major. All you do is transfer that page to a blank page and transpose it up by five semi-tones and it'll play the same thing on an F major chord.

I've kept mentioning "pages" and I should explain that the Waveshaper uses nine pages (or screens) for the various functions. They're all accessible from each other at any time and the accompanying documentation outlines their functions.

Page 2 is the Sequence page in which you enter your music and the display has 32 spaces in which to enter notes. The Sequence pages are numbered as you build your masterpiece, and you should think of a Sequence page as a single bar or measure of music. There are 156 Sequence pages available for use.

These pages are then put into the Master Sequence block on **Page 1** which is itself identified by letters A to P, there being sixteen Master Blocks available. The whole composition is then put into the final Sequence also on Page 1 and you have the option to (P)lay it once through or (L)oop it continuously or (S)top it, these keys being used in conjunction with CTRL as indeed are most functions throughout the program.

The sequence created can be played in whatever order you like in the Master sequence, a great time-saving feature when you want to play repeats or even when the second half of a song starts with the same three or four bars as the first half and then changes slightly. You can have the Master sequence play those three or four bars in both places without any further effort on your part.



Page 3 is the Shapes page and you get to define ADSR here and you can use the Waveshaper's own input device (called a Rat!) for this operation or alternatively a Koala Pad or a paddle could be used to draw the various Shapes on screen.

Page 4 is for Voices and this is the one where you can really go to town and change all the sound parameters, set triggers for other equipment, move a voice into another voice etc.

Page 5 is for setting, displaying and changing Waveforms whilst **Page 6** is where you'd go to for Sampling. File access to and from disk is covered on **Page 7.** When building your composition you can do repeated saves if you like, with each save overwriting the previous one. You can of course save the files individually if you want to monitor the progress of your tune.

The suppliers of the Waveshaper will help with personal guidance to buyers in the Sydney area and will in fact come to your place, a nice touch in this day and age of take-it-or-leave-it.

They are re-writing the documentation for the Waveshaper to make it more readable too. It was pretty technical for a beginner in sound synthesis although experienced people would probably have had no trouble. I believe there may be an audio tutorial cassette soon too. There is already a demo cassette of great music created on this unit which really opened my ears.

Pricing ranges from $479 for a single voice set-up to $896 for the 2-voice unit with Midi capability as per the unit I reviewed.

Waveshaper comes on screen the moment you power up, but there is some disk access for loading of voice files and expansion software. It does take a little time to load in these files from your 1541 so I'd suggest a fast load system would be a useful addition to your gear. A fastload cartridge would be no use as the cartridge port is tied up anyway so once again I'm recommending the Cockroach Turborom (it'll help with your other programs too!).

Sound synthesis may all seem a bit daunting at first but if you're prepared to take it step by step and explore each of the functions of the Waveshaper it's very rewarding.

I certainly had a lot of fun with it and if you're a music or sound freak in addition to being a Commodore nut then this could well be for you.

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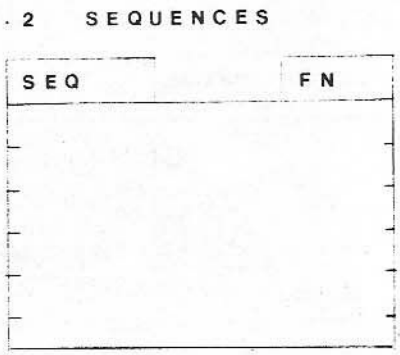

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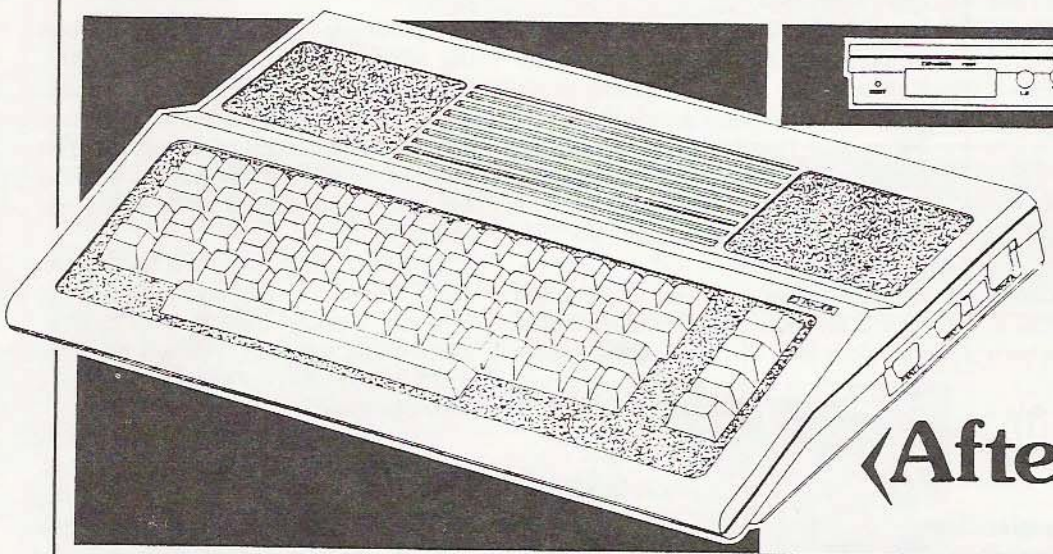

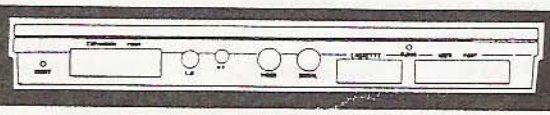

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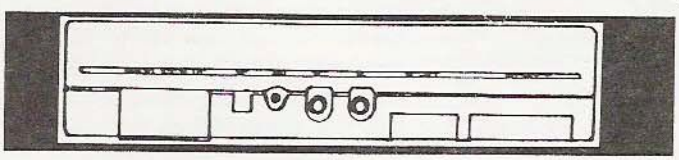

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Flash Gordon

by J Mark Hunter

Well, they finally did it...created a Flash Gordon video game.

And they finally did it again...gave it to J. Mark Hunter to review.

Sorry Flash, sorry ball boys.

As I write this the title track from the movie keeps going through my brain, the Queen tempo, the computer revamping, the screams for Flash to be careful as he motors along in outer space. Never liked the guy myself, that much. His hair was too blond or something, but when the Buck Rodgers tape comes in, then I will be appeased. Specially if the Bangles do the soundtrack.

Not too high on new creativity, *Flash Gordon* the Video Game carries a lot of pizzazz, but no innovative umphff.

The Plot...quote: "twenty four hours to save the world! The evil Ming has targeted Earth with planet-killer missiles." Our leaders have done that already, we can't get that worked up about this. "To stop him destroying life as we know it, you must take the part of superhero Flash and foil the dastardly plot."

"Dastard? You want me to use it in a sentence, ma'am?"

"Yes."

"Okay. Ming is a dastard."

Then the game gets centred around the destruction of the bad guy. They tell us that Ming must die if Earth is to live. They're probably going to use his kidney for Peru or something. He carries the missile controls with him and only by destroying these can you hope to succeed.

Now where did they get that idea? Who are they?...oh, yes, M.A.D., (Mastertronic Added Dimension). Ming carrying the goods around handcuffed to his wrist - these guys have been watching the overnight news too much.

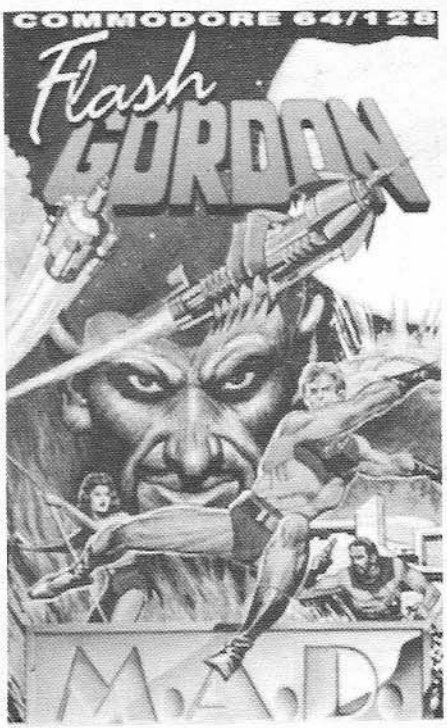
And you begin the game a failure. The manual immediately tells you that the start of the mission has not gone well. Your ship has crashed in the jungle on Ming's world (a C.I.A. supply plane goes down in Nicaragua) and instead of a nice simple dogfight and a good dose of orbital bombardment to solve the problem, you're going to have to go for Ming in direct hand-to-hand.

There's a guy they tell you about - Prince Barin. He lives in a cave, they don't say whether there's a moat around it, but Barin can at least provide you with some transport to get after Ming.

But first you will have to win his respect - this is where my game ended and I could go no further, the guy laughed in my face.

I had to get Farrell to play and tell me what happened, but Barin didn't respect him either so we ended up getting some wino out of Centennial Park to take a look and it worked. Now I think Gareth Powell is considering keeping him on staff permanently with a regular column.

Assuming you can pull off the diplomatic maneouvres with the Prince, the final challenge will be to intercept Ming and his robot guards and elliminate them before they can activate the missile



controls. The guards can fly, are heavily armed, and have a pet peeve against F. Gordon. (Take good care of your pet peeve, he loves you.)

And remember the operative numbers - 24, cos that's how many hours you've got to get the mission wrapped up. It's not real time, but the counter is there.

Let's take a closer scrute at the game.

The game is played in three stages. You must carry out each of these parts in sequence.

1) Jungle: make your way through the undergrowth to the caves of Barin. There are ravines to be jumped, ammunition to be collected, skeleton monkeys and various other nasties to be avoided or blasted, as well as working out where you are, let alone where you are going.

2) Barin: in order to win the respect of the Prince you will have to defeat him in a little "friendly" hand-to-hand combat. Should you succeed, you will be given directions to intercept Ming and provided with a jet-bike.

3) Jetbike Pursuit: suitably kitted out with Barin's mean machine, you have to track down Ming using Barin's on-board instruments and deal with the rear-guard, a minefield and power gates on the way. If you can get close enough you'll have earned the chance to put a final ka-chunk in Ming's vase.

So one thing this game has got is a pretty complicated menu of things to do. It is fine-tuned to adventure and action, and I was intrigued by most aspects of the play.

The graphics are good and the colour even better, and though the music was not Queen it was conducive to play.

In the opening jungle section on your screen at the right is a game clock reminding you how long you have left to complete the job. Every time you get knocked out the clock will run on while you're coming around. Different mishaps

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will take different amounts of time off your 24 hours. For instance, if you fall down a ravine you're looking at at least an hour or more to climb out of there and brush the dirt off your Gordon gear.

Below that are the chambers of your gun, showing how many shots you have left. To the left is a guide to how many are as fit together.

A note of advice here, try to stay on your feet long enough to map out your surroundings. At crossroads you can move into and out of the screen by holding the fire button and moving the joystick in the direction you want to go. Play is very maneouvrable on the joystick, things like flying kicks, running and ducking.

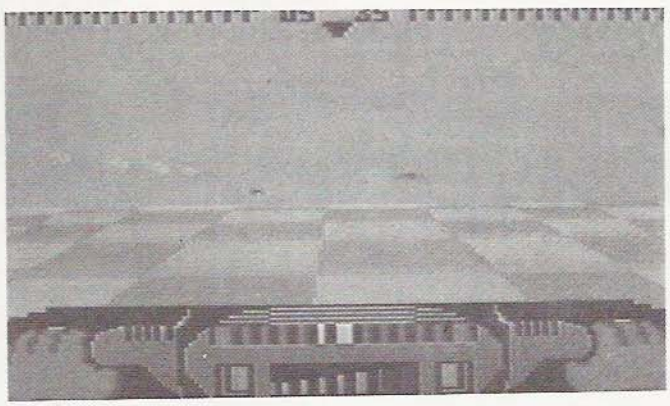
Directions are relative to the direction of player movement, i.e. controls reverse when he turns around.

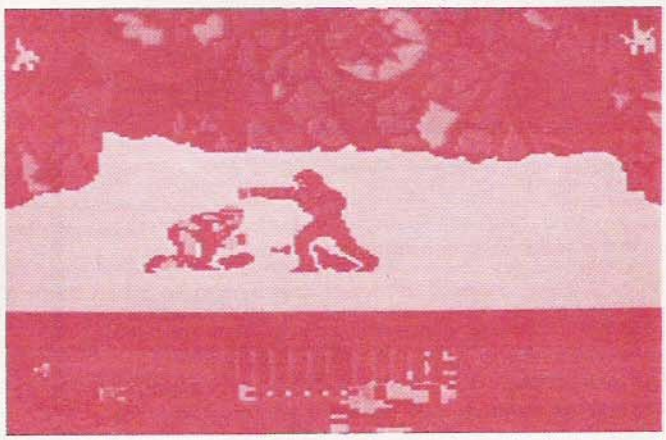
Making a map is really vital to successfully getting through the first phase of the game. Landmarks are not repeated, so you must keep careful note of them, and arrows along the way helpfully direct you to Barin's cave.

In battling Barin the combat is measured by a depicted tug-of-war. This is in a window at the feet of the struggler. This indicates how close Barin or Flash are to victory. You have to pull the centre bar all the way to the left to defeat Barin and gain the help you need. This is achieved by hitting him more than he hits you, and the range of hit types are many.

We're advised that's it is best to fight in bursts, backing off if Barin starts to get the better of you. The wino did not find it easy (mostly because he was half-sober at the time).

Skill gets kind of involved here, inviting you to learn the moves and use combinations to confuse Barin. Interestingly, the longer the fight continues the better it is for you. Old Barin





begins to tire and eventually becomes less mobile. But don't try to be a hero before he's out of it, because at the beginning of the fight he is definitely at his strongest.

Then there's the chase seen on your jetbike.

Here you have a brilliant array of weird and wonderful gadgets to manipulate.

On the bike control panel is shown the power-gate direction. Move your joystick left or right to centre the cursor block on the indicator. The graduations down the side of the screen show your shield strength. The higher the better. When the two lights on this indicator flash and Ming is in view then you know he is within range of your missiles.

The joystick controls both your movement and fire. Once travelling at speed, steer through the power gates to build up your energy levels and then prepare for the heaviest number of the whole journey - a giant minefield and Ming just on the other side. All you have to do is jetbike it through these dynamite potholes without hitting anything because this rapidly brings down your energy and too much of a bad thing is fatal.

Then, the concluding scene is Ming on his own jetbike heading straight for you with nasty dilated pupils. The guy is a great fighter so if you don't want Gordon to be just a Flash in the Pan you better do your own stuff and better.

`What do you mean, "Flash Gordon approaching?" Send out four Volcan agents to bring back his body.'

I can't, Babe, cos Flash just Flashflooded all over your Mingmaster and the game and the earth are fine. Sorry to spoil your party but maybe you better move on to a new galaxy or a new software company. M.A.D. did okay with this one, and I think you'll enjoy it.

AUSTRALIAN COMMODORE REVIEW RATING CARD

Game: Flash Gordon	Graphics: 59
Machine: Commodore 64,128	Presentation: 72
Publisher: MAD	Documentation: 53
Distributor: ISD	Sound: 54
Price: $11.98	Music: 46
	Impact: 46
	Overall: 34

XENO

by J Mark Hunter

Hockey Night in Canada was probably the most watched program on the Friday evening viewing screen around the nation when I was growing up north of the U.S. border. And if you tune into the late night TV here at times, you can catch the Stanley Cup play-offs as the American and Canadian teams slash and skate each other to the limits.

Well, hockey games have been done before when it comes to manufacturing a video game based on such, but how about with a different twist, from an unusual angle? Play that hockey game not in Canada - but in outer space, in another zoid, another galaxy of time.

Yes, I like it ... and *Xeno* is doing that. *Xeno*. Like in xenophobia? (Fear or hatred of strangers?) Well, maybe, cos that sure sums up a hockey game, or walking twenty miles into town for work instead of taking the train.

Xeno, it's got a nice ring. Let's see what the A`N'F Software company has for us, like something tasty to go with the name.

The setting.

Well, take out your Souvenir Programs for the 2386 Earth Congress Xeno Championship Games and read the accompanying notes.

The flat face of Io stretched into the distance. The only buildings were a scattering of E.A. (Earth Atmosphere) huts, and the only lifeforms a small crowd of miners and pioneers. Across an improvised field two suited men pursued an ice puck, pushing, kicking and propelling in any other way they could think of, two large blocks of solidified methane gas. (Sort of like a rubber fart).

Then, in this recorded scene, *one man kicked his gas block into the puck hard and accurately enough to ricochet it between two metal poles stuck into the iron-hard ground. He danced clumsily in the air, encumbered by his suit and the uncertain gravity. His pleasure was not very long lived. His opponent rushed at him and knocked him over. Before long a full-scale brawl had broken out, involving spectators and players. Even the referee joined in.*

The game we now know as Xeno, *named after the Earth colony on Io, began as a rough and almost ruleless pastime among the colony's platinum miners.*

Laboring long hours in harsh conditions, making big money but having nothing to spend it on, they found that Xeno *provided the dual attraction of exciting activity and something uncertain on which to gamble their wages.*

In the game, as played in this pioneer community, almost anything went, although actually killing your opponent was considered unsporting.

That was almost a century ago. Our modern game is a more sophisticated and humane affair, though still a tough test of reflexes and athletic ability, not to mention courage. Using the technology of our age, the players now sat atop ground saucers, harnessed and protected, their vital signs electronically monitored to pick up early evidence of physical damage.

Danger and accidents are unavoidable, but the methane blocks and unbridled brutality are gone. Gone from Io at least, but I think the platinum miners are picking up the Stanley Cup on the satellite, and they say it's better!

Today, versions of Xeno are played by children on frozen lakes and at ice rinks. There are computer and table top versions, enjoyed by all age groups. The great players - such as Kreon, the current Earth Champion - are folk heroes. This series of Championship Games will be watched by tens of billions throughout the inhabited galaxy, and revenues from advertising, vidicasts and stadium receipts alone run into trillions of credits every season.

In the mining camps and trading stations, though, Xeno is played with the same vigor and disregard for niceties as in its early days on Io.

And we're left gasping for air! Give me some of that *Xeno*! It sounds so good, I've just got to play! Yeah, well, that's sure okay, because there's plenty to go around. I dug *Xeno*, and *Xeno* is diggable for you. I'll show you now, how it's done.

Xeno has a one or two player option. Each player controls a manoeuvrable disc in an attempt to push a smaller puck through his opponent's goal. The winner, in logical sequence of events, is the one to score the most goals in the game.

Setting the game variables you can differ certain aspects of the game to suit your level of playing ability.

If you take the keyboard options, *Xeno* asks you to define each key function in turn. If you also choose two player mode, be sure to define your keys carefully so that both players can easily operate them without getting in each other's way during the course of the game.

Control of the cursor showing the direction your saucer/ disk will travel switches automatically from player to player after a preset time interval. This interval is the time-out period. It is entered as a single number of seconds from 1-9. By entering 0 you can disable the time-out facility.

Xeno is played in four quarters of equal duration, which may be varied from 1 to 9 minutes.

You can handicap the computer by slowing down its response to your shot. The handicap values range from 0-9. The *Xeno* program has default settings. Follow the screen instructions if you wish to change these, and .... you are ready to Xeno your face off!

A coupla' hints.

The rules of *Xeno* are very simple. Play proceeds in turns from one side to the other, each player moving his disc in such a way that the puck is deflected in the desired direction.

You may knock your opponent's disc out of position, or retreat to cover a possible shot at goal. In either case it is not necessary to make contact with the puck.

When setting the variables, give some thought to the consequences.

With a very short time out you may have insufficient time to react. Aditionally, if a quarter is too long, you will have to maintain your concentration for a considerable time.

Okay, now I'm going to talk to you about how much I liked *Xeno*. Xenoism is my current frame of mind, cos Xeno blew it.

Yes, it was not a bad game at all. We're talking thrills, excitement, moderate pleasure, no - more than moderate, two tads up.

Mostly, because it is a unique game. The colour, the graphics, the sound - top quality.

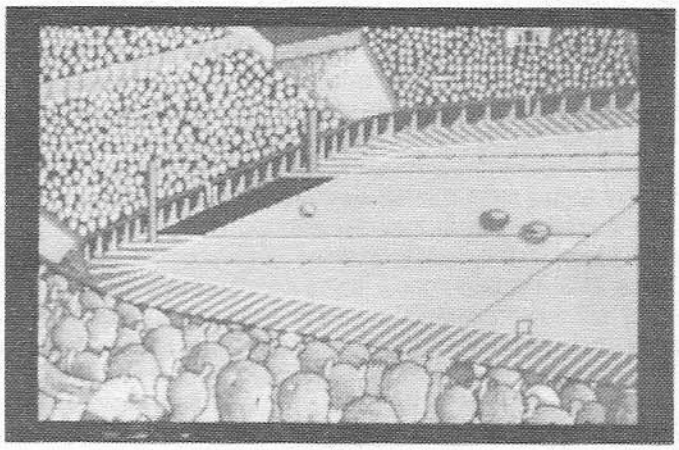
But aside from all that, the innovative aspect of play, the way it's done. Fast and furious, technologically superb. Opening screen shots to me were quite attractive, I was interested right from the word run\stop, and all the way through to the depressing of the power button.

If you want to get away from the robotic ruthlessness, the alienating aliens that perturb your senses and bring you down like in so many other featureless games they've got clogging the market as of now - then I would suggest Xenoating yourself for a couple minutes and see how this London based company is spending their boardroom hours in production policy talks.

What they all decided on was the Xeno championships of the world, and that is what I've decided on this summer as a beach party retreat - when the pace has wound down and the winds have whipped up a southerly chill.

Yep, when the Stanley Cup season is over or Channel 7 can no longer afford to pay for the satellite viewing rights, then this Canuck is tuning into *Xeno* for some hockey satisfaction.

Lay a little Glass Tiger on the speakers and this program on the screen and you've got quite a show from somewhere north of Canada - like north of our solar system and beyond.



AUSTRALIAN COMMODORE REVIEW RATING CARD

Game:	Xeno	Graphics:	42
Machine:	Commodore	Presentation:	37
Publisher:	ANF	Documentation:	88
Distributor:	ISD	Sound:	56
Price:	$34.95	Music:	37
	Cassette	Impact:	71
		Overall:	55

BMX Simulator

by J Mark Hunter

There's this little dinky town in Spain called Talavera de la Reina, `bout two hours southwest of Madrid.

A 22 year old guy from the University of South Australia wearing headphones and a backpack steps out of the train at the station and before he can even get his Eurail Youth Pass out of his wallet the train leaves and he is left alone on the platform.

He makes a phone call.

He's in the exact middle of Spain here. It's July, it's stinking hot, and there ain't even a Coca-Cola sign around.

He dials. He calls a number in Motril on the coast next to the Mediterranean Sea.

The number is a phone in a burnt out factory that used to make cheap garden tools.

It's answered.

'Brian?' 'Mom?' 'Ya.' 'I got here.' 'Good boy. Now remember the deal. You've got to stay there for two months, and your father and I will pick you up on the way through to Zaragoza.'

'Uh-huh, but it could get messy. There's a lot of dust out here. Lots of it.'

And there's the connection.

I've known a bunch of great BMXers in my time and Talavera de la Reina is about as ecstatic as you're going to get. Lots of room, no people, really great.

And we consider, Richard Darling. Wonderful follow up to BMX Racers. We're looking at eye in the sky viewing - amazing realistic simulation - the starting ramp, burms, bumps, water splashes etc. All effective and so realistic.

We're looking at a two player option and seven different, progressively harder courses.

Then the breakthrough. Darling achieving the first ACTION REPLAY option. Whenever there is a close finish you can see it again on the REPLAY - and if that's not enough, press the S key and watch it in SLOW MOTION! Very impressive, I was fascinated, even though I grew up in the Motorcross era with shock absorbers and big springs.

The program has excellent music, though it's rehashed material from another game and I had heard it before. The graphics are stunning and the colour is exceptional.

It's action plus and dynamic. You race as though you are in a real BMX Championship. The burms help you turn, the rough ground slows you down and all the hills and different grade surfaces affect the rider as in real life.

The screen display is well presented with the number of laps raced and time elapsed shown at the bottom of the screen for one or two riders. The time limit is shown in the centre of the screen on the bottom line.

I don't know if the older audience is going to get into the game, kids and such will be totally rapt though. Because it is fine material.

(But a "garden tool factory"?)

Yeah, it makes a great place to store the bikes when the rains and the bulls come.

Or the offices of a new Spanish computer magazine.

I think I'll be looking to them for employment after this review.

AUSTRALIAN COMMODORE REVIEW

Game: BMX Simulator	Graphics:	62
	Presentation:	58
Publisher: Codemaster	Documentation:	32
	Sound:	43
Distributor: ISD	Music:	60
Price: $9.95	Impact:	44
	Overall:	49

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The Cockroach Graphics Pirate is a transparent cartridge for use on the Commodore 64, SX64 and 128 in 64 mode.

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DEALER ENQUIRIES WELCOME

Sidecar!

PC compatibility for your Amiga

Well, it is finally here! Sidecar has arrived. A recent 48 hour computer sale in the city of Sydney saw Sidecars sold out in six hours.

Rumour has it that sales staff just stood at the cash register and handed out receipts. Not bad for a machine that the opposition says will not sell. Ah, but the price, I hear you say.

Yes, that could be a problem for someone who cannot completely justify its purchase. Although originally priced to sell at $995, the new price of $1295 is not that dear for what amounts to another PC. We tried everything we could get our hands on, and the only software that would not run was that written directly to the IBM BIOS chip.

The package includes the MS-DOS manual as supplied with the Commodore PC10 and PC20. Added to that it also comes supplied with its own *Kickstart*, *Workbench*, Sidecar startup disk and a 26 page user manual.

As far as the Sidecar package itself goes, the system is not totally developed for the user who wishes to transfer data files between MS-DOS and AmigaDOS. This, as noted by Commodore, is still under development, although it appears that the machine is capable but the software still needs work. Other little 'glitches' are to do with the hard disk setup by Amiga DOS. Documentation with the Sidecar indicates that an MS-DOS window must be opened before access by the AmigaDOS.

The expansion slots internally take most hard cards on the market today. The three I have seen include the Qubie, +4 hardcard and the Verbatim hardcard.

Instructions with the Sidecar include the relevant details to set the system up and to format the drive. Anyone using a PC in the past will not find any major changes or difficulty in the commands. If you fill in a form supplied by Commodore, they will send you the disk required to do the partition on the hard disk with AmigaDOS. I am not really sure why this is not included with the machine, but I'm sure the technical boys at Commodore have the answer if anyone takes the time to ask.

A feature on the Amiga/Sidecar system that takes my fancy is the ability to use the Amiga colours on an IBM program.

You are not restricted to the 16 colours of an IBM machine. The added feature of having the PC program within a window over an Amiga program is also convenient. Pull down commands from the top of the screen as seen on the Amiga are also used and available whilst running a PC program.

Those people familiar with the PC will quickly notice that the Amiga has a different keyboard from that of the machine it is trying to emulate. This could cause a bit of difficulty when trying to do a warm boot for instance. Commodore have overcome this problem and include in the documentation, the new keys that will emulate those on the PC. They are:

PC	AMIGA KEYS
Number Lock	N & Right Amiga
Scroll Lock (1)	Right Amiga & Help Key
Scroll Lock (2)	S & Right Amiga
Ort Sc*	Shift, Right Amiga & P
+ on Keypad	+ and Right Amiga
Break	Help

Text colours running in PC mode tend to govern the speed that the emulation will run. It is suggested in the hardware notes with the Sidecar that the fewer text colours used, the faster the application will run. This, they stress, will not hamper the graphics side of the application.

In all, I think the machine is a valuable addition to the Amiga family. Anyone who has access to IBM software will find it of great benefit for doing work at home.

An added feature too, is that the Amiga 1010 3.5 inch drive will operate as an IBM drive (either 720K or 360K) whilst running off the Sidecar.

When you think about it, $3790 is a cheap price for a machine that will run IBM and Amiga software. For that money, I don't honestly believe anything else is in its class.

Adventurer's Realm

by Michael Spiteri

Welcome to the start of another year of The Realm. Australia's only true adventure column will slowly increase to huge proportions, and we hope to bring you many new features, bigger reviews, more maps, and more hints & tips.

If you are stuck, or can help someone else, or even just express your views, the address to write to is:

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SEAFORD, VIC 3198.

***IMPORTANT NOTICE:**
The VIATEL help facility is no longer available.

CHARTS - CHARTS - CHARTS

More charts this year, with top sellers in Australia and UK!!

Australian Top Ten Adventure/Strategy Programs

1) LEATHER GODDESSES OF PHOBOS - Infocom
2) SILENT SERVICE - Micropose
3) HITCHHIKER'S GUIDE TO THE GALAXY - Infocom
4) LORD OF THE RINGS - Melbourne House
5) TRINITY - Infocom
6) MERCENARY II - Novagen
7) ULTIMA IV - US Gold
8) MERCENARY - Novagen
9) BORROWED TIME - Activision
10) ELITE - Firebird

United Kingdom Top Five Adventure/Strategy

1) LORD OF THE RINGS - Melbourne House
2) MERCENARY II - Novagen
3) JEWELS OF DARKNESS - Rainbird/Level 9
4) LEATHER GODDESSES OF PHOBOS - Infocom
5) SILENT SERVICE - Micropose

I need to know your favourite adventures, write in and tell me about them!!

REVIEW: *Trinity*

For 128 (80 column mode) & Amiga.

We will now take a walk through Hyde Park, the initial setting for this fascinating adventure from Infocom.

A brooding statue of Queen Victoria faces east, where the waters of the Round Pond sparkle in the afternoon sun.

Your eyes follow the crowded Broad Walk north and south until its borders are lost amid the bustle of perambulators.

Small paths curve northeast and southeast, between the trees.

A cloud of pigeons fills the air! They circle overhead and congregate around a nearby bench, where an aged woman is selling bags of crumbs.

"Feed the birds! Thirty p!" Her voice quavers with heartbreak.

So I buy some seeds, take my change, and then proceed to...

>FEED BIRDS

You take a handful of crumbs out of the bag. They fall between your fingers and tumble across the ground. As the wild birds gobble down the crumbs, a glind of red catches your eye. Frowning, you stoop down for a closer look... and gasp with astonishment!

The ruby at your feet is bigger than a walnut, with finely cut facets that sparkle with crimson fire. It must have been in the bag of crumbs.

>TAKE RUBY

As you reach down to touch the ruby, a very large bird races out from behind a tree. It snatches away the ruby with its beak, zigzags through a group of tourists and disappears to the east. If you didn't know better, you'd swear that bird was a roadrunner.

"It's time!" shrieks the bird woman.

The "time" our birdlover is referring to is the start of World War III, and before you have a chance to really discover why

the Albert Memorial is so ugly, a nuclear atom bomb heads towards the park. As for the bird and the ruby, their relevance to this exciting affair becomes clear later towards the end.

With some quick thinking, you fly to another world minutes before the bomb destroys the planet. You find yourself following various creatures into a huge mushroom-shaped cloud. Once inside, it is here that *Trinity* officially starts.

The task set to the adventurer is to simply prevent the deadly nuke bomb from existing. This means going back in time to the sites of previous nuclear explosions.

Beyond this cloud lies a mysterious, spooky land. I decide to explore. I come across many interesting places, which include a huge crater containing a chunk of metal, a small cottage with a diary that writes itself and a magpie that constantly blabbers out garbage and tips, a river that contains dark, misty water (no...it's not the Yarra), a cemetery that contains my grave, and then a barrow (ancient burial mound). As I enter it a door slams shut behind me.....

Something just moved.

You peer uneasily beyond the pool of light around the splinter. Nothing. Then as your eyes adjust, you descry a vague human outline crouched against the tunnel wall. "Awk! Barrow-wight."

>EXAMINE BARROW WIGHT

One of the barrow wight's eyes dangles from its socket on a moist pink nerve. The other glares back at you from the darkness of the tunnel.

Clever thinking gets me out of this mess, only to come across another one of those things that this fantasy world seems to be covered in - mushrooms.

However, the mushrooms are very large, and contain a white door with no lock or handle. When the signal is given by dawn, it is time to explore each of these mushrooms. A large gnomon off a sundial points its shadow to one of the mushrooms, the door swings open, and I enter.....

Would you believe by getting this far you haven't even scraped the surface of the game? *Trinity* is a game of mammoth proportions (hence the 128k minimum requirement). Beyond each mushroom lies another adventure in itself. The player will visit places that exist now or once existed. The descriptions of these places are very detailed, and amazingly, very accurate. The player gets the chance to take part in historic events, and even change them!

Everyone knows Infocom text is good; the text descriptions in *Trinity* are outstanding. The atmosphere created is incredible, and miles above the atmosphere produced by pretty graphic pictures. Text when used correctly produces the best type of adventure - and Infocom's Trinity proves it.

Not only do we get great descriptions, we get great playability. The vocabulary is bigger than that used in any other Infocom game, and my 1571 returned the responses in an instant. Very, very rarely did I get an error reply; and when I did, I was informed clearly of the problem.

No "I can't do that" in this game. Instead we have replies like "The story doesn't recognize the word ----" and "The story doesn't understand the word ---- when you use it that way." Replies like these make gameplay much easier, and are really quite necessary when you come to think of it.

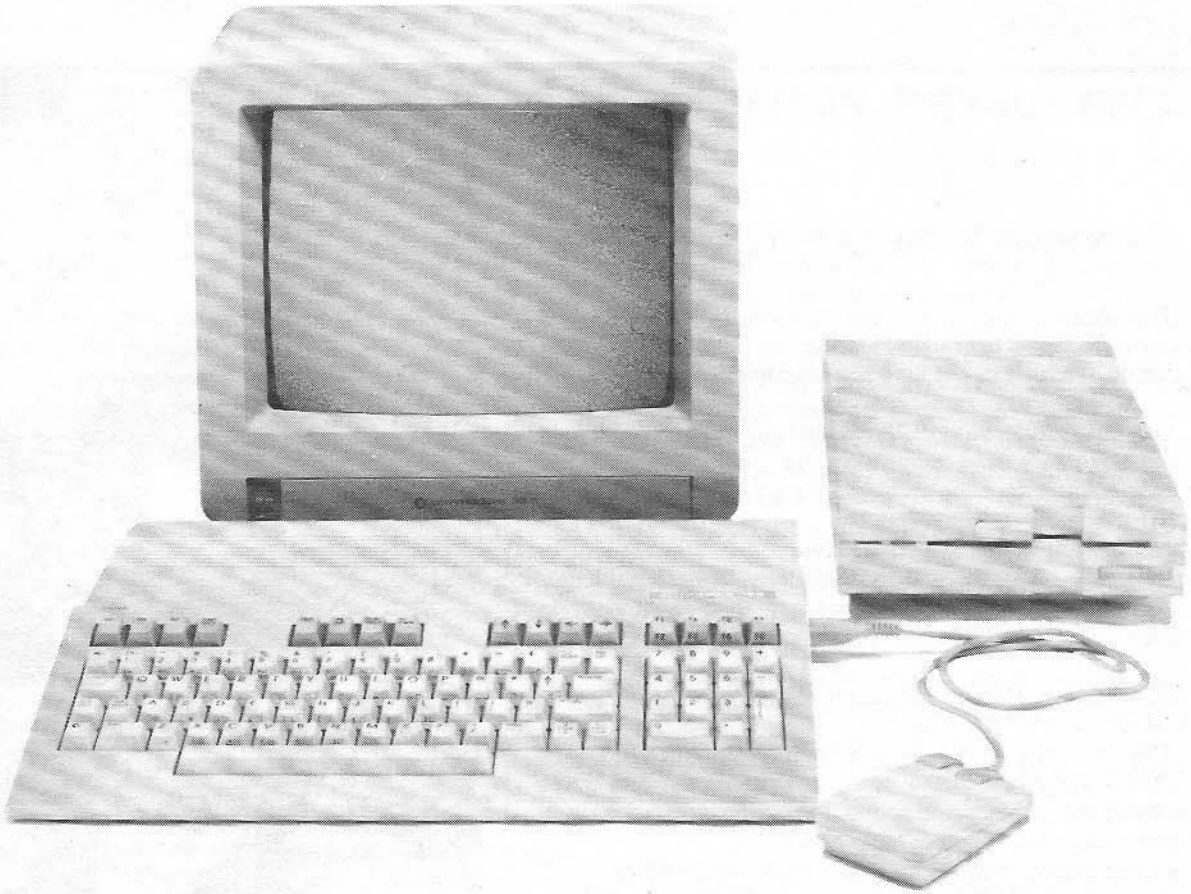
Trinity does understand the word HELP, and it clearly tells you to purchase one of the hint books!!! The game also clearly informs you that it understands bad language, and actually makes the player feel rather childish!

Infocom have now begun releasing their games in standard packaging, and still allowing room for lots of little goodies, such as a golden sundial, a map, a guide to making paper birds, and a colourful comic to establish the story's background. Also, the game takes up a double-sided diskette.

I had a great time playing *Trinity*, and I would go as far as to say it's the best adventure game I've ever seen released since *Deadline*. 128 owners cannot afford to go past, although most 128 owners cannot afford to buy it! 128 version sells at $50, while the Amiga version sells at around $80.

Distributed by Imagineering.

Atmosphere: 98%
Playability: 99%
Plot: 100%
Vocabulary: 98%
Overall: 99%
Verdict: BUY IT!!



The Commodore 128

...so powerful, it's 3 computers in 1

It's a productivity computer!

The Commodore 128 will amaze you with its new generation of powerful yet easy to use productivity software. Like 'Jane', which allows you to follow simple symbols instead of typing complicated commands. And because it's so easy to learn, you'll have the 128 working hard in minutes! You get 128K of RAM both 40 and 80 column displays, and 16 colours for graphics.

It's a family and education computer!

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The Commodore 128 lets you use software packages like 'Wordstar, dBase II and Supercalc', all in 80 columns. The Commodore 128 gives you all the computing power most businesses will ever need now or in the future.

Power without the price. $699.

News * Info * Gossip

The Pawn is selling well on the Amiga, but the 64/128 versions are taking their time to reach Australia. Hopefully they should be available by the time you read this.

Leather Goddesses of Phobos is now Australia's biggest selling adventure, and it has only just been released!! The game is not as disgusting as rumours are making out. Even the LEWD mode stays within the boundaries of decency. I can guarantee you one thing - it'll leave you in stitches. Every paragraph is hilarious, and much funnier than *Hitchhiker's Guide*. Watch out for a complete review in the February edition of *Home Computer GEM*.

Dungeon and Dungeon might enjoy playing PHANTASIE, by US GOLD, for the C64 (disk).

The adventurer and his trusty companions have to kill the evil Black Knights and the sorceror Nikademus. The game features good graphics and sound. It was released in the UK in October, so it should be available here soon.

Psst! Lever and Jones, of *Terrormolinos/Hampstead* fame have another adventure up their sleeves. Entitled *Dodgy Geezers*, it's a hilarious graphic adventure. Soon to be released by Melbourne House.

Realms Debate Center

How would you like the hints and tips presented in Adventurers' Realm? Would you like cryptic crunchers or straightforward solutions? Have your say! Join the current debate on how clues should be presented. Here are some of the views expressed so far by readers:

"And none of those cryptic clues!" writes Mr W Russell of Glendale, NSW. "I've seen one that says 'to get by the Dsinn you must blow'. Well, blowing a Dsinn is NOT something I intend to do!"

Heather Marshall, of St Morris, SA, thinks otherwise...

"The clues should be more cryptic. I always feel cheated when I read a clue that is a direct answer to a problem. It is much more satisfying to solve a problem using your own brain power."

Meanwhile Vivienne Slater adds her say to this debate:

"Although I really appreciated the ZORK MAZE MAP, I wonder if it is playing fair to print entire maps of a game or even complete solutions. Isn't part of the fun discovering new locations all by yourself? I know it is for me."

We have since stopped printing complete solutions. How many of you think we should stop publishing maps? Don't be afraid to speak, it's YOUR adventure section. Remember the saying: "If you like it, tell a friend; if you don't, tell us!"

More on this controversial subject next month.

Adventure Funnies

Every game has its hidden jokes and funny responses. If you know of any, send them in!

Bill Weeden of Nth Clayton, Victoria, sent in a whole host of funnies that can be found in Telarium's *Perry Mason*. For example, you can flush the toilet, turn on the tv in the den, and look in the mirror in the bathroom! When in court, try some courtroom theatrics like whirling towards the witness without standing up!!

Steven Woolhouse of Morphett Vale, S.A, also sends in a whole host of funnies. In *Sherlock*, you can have fun telling Watson or Lestrade that THEY are guilty.

You can even pick up the sleeping Daphne, drop her in your armchair, and then sit!! Have fun hailing the two cabbies in Baker St, and then locking them in your closet!!! In *Tracer Sanction*, try kissing or %&%$# the man at the beginning of the game. You can try jumping off the Bridge on Brenon, or even examining the jeweller. In *Dallas Quest*, try jumping on Sue or killing the cat!!!

Also, in *The Hobbit*, get the gang to go to the black river and tell them to cross it! You can also wear the magic ring and kill Thorin!

Suzanne Parkes sends in a ZORK I funny. If you die and find yourself a ghost and cannot take anything, getting angry and typing in a bodily function (pooing) will earn you the response....

Finally, in *Leather Goddesses of Phobos*, enter LEWD mode. When asked for your age, enter something below 18. Now try entering LEWD mode again!

Problems * Views * Tips * Comments

Steven Suthers bought *Hunchback - The Adventure* the other day, and was very disappointed with it as a whole, because the game was TOO EASY! Steven then goes on to say:

"It only took me a few days to solve this adventure and I am not a very experienced adventurer. I have ONLY solved *The Count, Castle of Terror, Mindshadow*, and *Adventureland*." Well! I don't know what other people think, but somebody who solves *Hunchback* in a couple of days, and has already completed *Castle of Terror* and *Mindshadow*, in my mind, that makes a pretty good adventurer!!! Within these pages you'll find the map of PART I of *Hunchback*, with the next two parts to be published in the next couple of months.

Meanwhile, Steven is stuck in *Worm of Paradise.* He needs a valve and a medallion to join a club, but he can't seem to find the valve. When he played the game the second time, he couldn't find the invitation to join the club! What has he done wrong, Steven wants to know?

He is also stuck in *Robots of Dawn.* The characters in the game seem to respond with a meaningless garbled mess of random words and characters whenever he tries to ask them a question. Is he doing something wrong? Or is it the game?

After many months of intense keyboarding, **Bill Weeden** of Nth Clayton finally completed Trillium's *Perry Mason.* The game features a very crafty plot, and very clever witnesses. Help is at hand for any stuck detectives!!

Remember **Vivienne** "*hate 9 Princes in Amber*" **Slater?** She had decided to play the game again. Unfortunately, she didn't grow to like the game any more. She writes:

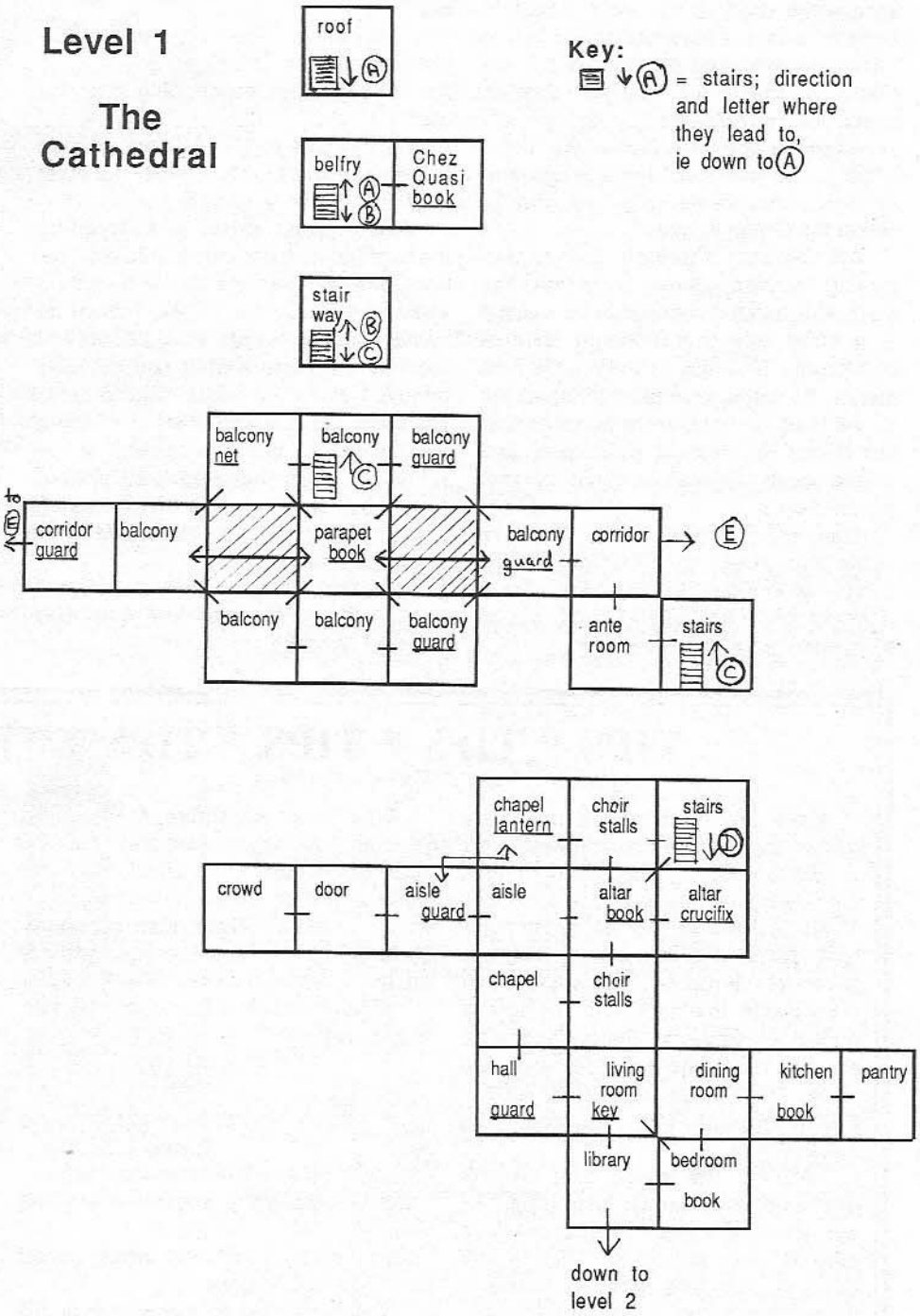
"There are supposed to be about forty different endings but I have only managed to find about three or four. Perhaps they are talking about all the sudden deaths but I could swear there are more than forty of those!"

I think that the forty endings are when you actually complete the game. You can complete the game, but not

Hunchback - The Adventure

Level 1

The Cathedral



have solved it. For example, you might be king, but some of the family members might be dead or missing. You can also decide to join Eric later in the game, and the game will end there.

She sends me a description of where she is stuck, maybe somebody can help her out: "My problem this time is how to escape the shark in the mind assault in Benedict's tent. I have become a fish to avoid drowning, and now there's a shark ready to cause me another sudden death." Can anyone help?

Vivienne also finds *Lord of the Rings* "slow and a real pain" I totally agree!!! Anyhow, she wants to know how to defeat the Green Knight.

Alf Hoop, although he enjoys playing Infocom games, feels that they don't really push the Amiga to its limits. It is a strict rule that Infocom NEVER incorporate graphics in their adventure games, no matter how good the machine is. Alf likes the graphics in *Mindshadow*, but thinks the textual responses and limited vocab is quite low. What do other people think?

Can anyone give **Mark Sievers** more info about the missions to be completed in *Elite?* He has so far reached a rating of COMPETENT with lots of money and a fully equipped ship.

Jamie Kennon of Sebastopol writes with problems in *Ballyhoo*!! Here they are:

1) How does he get into the meeting in Katzen Sommer's trailer?

2) How does he move the old plywood sideshow front in the Menagerie Nook?

3) Why is the cat hiding under the bed?

Jamie writes: "The next time I visit the Not Very Well In The Head Hospital For Adventurers', they aren't going to let me out!!"

His friends are no help, because they are arcade freaks. Now, now, we must not resort to bad language, Jamie.

Steven Woolhouse is annoyed by the fact that all the shops in Adelaide sell only one Infocom game, and that is *Hitchhiker's Guide*. I have found the same situation exists in Melbourne. I recently went into K-Mart and got very annoyed when the 'really helpful' sales assistant did not know what 'Infocom' was! I cannot understand why shops refuse to stock these games, after all they are the world's best selling programs (just take a look at the UK & Aussie charts!).

Come on Australian dealers, pull your socks up, and stock the complete Infocom range!!!

Amazement plus!! I only received one ZORK problem this month, and that makes **Suzanne Parkes** of Blacktown, NSW, January's **ZORKER OF THE MONTH.** Suzanne was having great difficulty controlling the basket in the Shaft Room!

Adventurers' Realm, don't forget, also appears in our sister magazine, *Home Computer GEM,* which deals with not only Commodore adventure games, but also other famous micros. Any problems sent in will appear in both magazines, that way we increase the chances of getting the problem solved!

Some important things to remember when writing to either GEM or ACR:

1) Enclose a stamped addressed envelope.

2) State clearly what game you are playing.

3) State clearly what machine you are using.

4) State clearly what magazine you are writing to.

5) Try and make your letters clear and easy to read!

TIPS * TIPS * TIPS * TIPS * TIPS * TIPS

Here are many clues for many games, supplied by many adventurers:

Bastow Manor: The other door does not need to be opened. The small box is no use either. In the study type "push panel" or "press panel". Then you will meet the robot. Throw water down the hole in the bathroom, using the bucket, three times. The apple can be opened using the knife found in the clock. The chest combo is IBDF. Leave through the trap door and escape.

Hobbit: The magic door can be opened by wearing the magic ring. To get across the black river, throw rope across, then pull rope. Go to the butlers room and when a barrel is thrown, jump onto it. Bard will help you kill the dragon.

Aztec Tomb Adventure: At the valley, go south, use rope to climb tree, trade the cloak for the box. From island, sail north, then east, then south. Wear lifejacket. Man overboard!!! Swim then go north. Climb the statue. The diamond should fit into the socket in the wall. GAME OVER.

(Above clues sent in by Steven Woolhouse)

Perry Mason:

- Ask Paul to investigate blood in dog pen.
- Show this piece of evidence to Tragg
- Golden leaves & cigarette are red herrings.
- Don't think too hard about asking Dorset & Crossman questions.

(Taken from the solution sent in by Bill Weeden)

Fahrenheit 451:

- Robot in power centre: "Die and be a riddance"
- Speaker in E48-49: "It was a pleasure to burn"
- Woman in elevator: "Rise up, my love, my fair one, and come away"
- Emile on phone: "And all our knowledge is, ourselves to know"
- Cleaner in church: "Give everyman thy ear, but few thy voice"
- Man in train: "Look how thy ring encompasseth thy finger"
- Bank clerk: "Nothing comes amiss, so money comes withal"
- Ray: "Some are born to sweet delight. Some are born to endless night"

(Sent in by 12 year old Andrew Hansen, to be continued next month)

Saturday Computer Services - Saturday Computer Services - Saturday Computer Services

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Just call (02) 498 3204 NOW to place your order over the phone! Or POST the form below.

Imagineering Entertainment & Business

Game	Cassette	Diskette		
Ballblazer	$29.00	$39.00	Paperback Filer	$79.00
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Leader Board	$29.00	$39.00	Companion	$79.00
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Game		Cassette	Diskette
Parallax	Arcade adventure		$39.95
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Indoor Sports	Family Fun - Air Hockey, Darts...	$39.95	$39.95
Ace of Aces	Arcade Simulation	$39.95	$39.95
Alley Cat	Sequel to Uridium by Braybrook!		$39.95

Order Form - Order Form - Order Form

Post to : Saturday Computer Services, P.O Box 189 St Pauls, 2031

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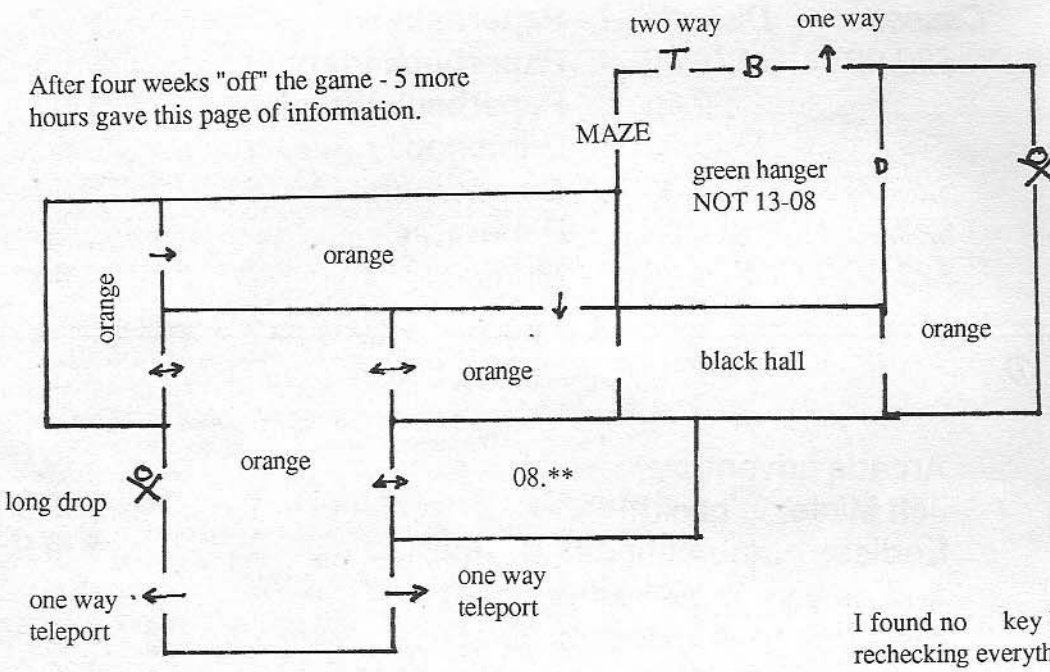
Holiday Specials

Special Offer : Public Domain Disks!! Just $39 for five disks full of software!! Please!

Mercenary II - Update

After four weeks "off" the game - 5 more hours gave this page of information.



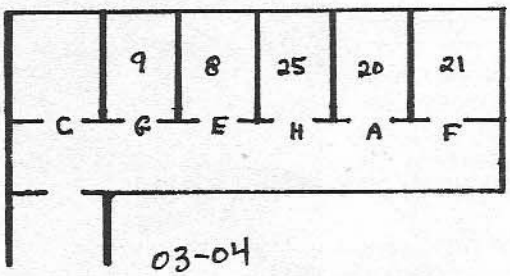
To get out of the maze and find the Pass key
N,S,W,N,S,W,N,E
once you're lost anywhere

I found no key but am rechecking everything.

Correction/Addition to previous map

03-04 hanger area

the 5 rooms drawn should have been 6 rooms like this (using my coding)



I forgot the catering supplies (25) on previous map.

I still haven't gotten the cheese out of the colony craft. Any help?

The 2nd colony craft at 88,250 altitude seems only to be a fuel depot.

I escaped with 2,000,000 exactly. The Palyars paid 1 million for destruction of mechanoid installations

Prices/Objects

Object	Mechanoids pay	Palyars pay
armament	10,000	165,445
winchester	274,000	274,130
energy crystal	450	22,450
large box	202,600	25

What I've labeled padded cell on the previous is actually a "rubber room" - the more you bump into the walls - the larger the cell becomes - good laugh.

Strange: at **-08 hanger complex (go north, east, north) - there is a white room. If you drop an object it appears invisable as objects are white! Nothing found there however. Perhaps significant?

National PAMS Directory

Here it is again, only this time we have managed to get all the relevant details onto our Commodore PC20 in a database called Qe4. We make no claim to accuracy. In fact, we ask that SYSOPS of systems mentioned here with incorrect details, or not listed at all, contact us on (02) 498 3204 to update their details.

The listing included in the story 'Have Modem will Call' was being added to our PAMS database at the time of publication, so these numbers will only have just been added as you read this. Further updates will be published at regular intervals, so please contact us soon to have your system included.

ABCOM-IBBSO47 RIBM
(047)36-4165 Ben Sharif
24 Hours Public

Ace BBS
(02) 525 9130 Larry O'Keefe
24 Hours

ACEA Commodore BBS (ACEA-BBS)
(07) 341 0285
24 Hours EST

Adelaide Micro User Group BBS
(08) 271 2043
1000-2200CSTWe&Hols

AM-NET BBS (AMNET-BBS)
(03) 366 7055
24 Hours EST

Andromeda RRAPL
(02) 764 3598
24 Hours Public

Apple Users' Group BBS
(02) 451 6575 Matthew Barnes
24 Hours Mem/VA

Augur TBBS
(02) 661 4379 Mark James
24 Hours Reg/VA

Ausborne (Osborne) RCPM
(02) 95 5377 Daniel Moran
24 Hours Public

Ausborne Users Group RCPM
(02) 568 2791 M. McGlynn-Worthington
24 Hours

Balmain RCPM
(02) 660 8182
24 Hours Reg/VA

Basic Users Group of Melb (BUGM) RCPM
(03) 500 0562

Bert
(02) 211 0855
24 Hours
(1200/75)

BEX 11 RCDM
(07) 395 1809 Rik Dalley
(19/COSMOS)

Bounty
(02) 918 3256 Major Mango
24 Hours

Breside Omen
(02) 457 8281 Geoff Arthur
24 Hours Public

Brisbane Commodore User Group BBS (BGUG-BBS)
(07) 808 2125

Brisbane Experimental RCPM 11 (BEX2-RCPM)
(07) 395 1809
24 Hours EST

Brisbane Microbee User Group RCPM (BMUG-RCPM)
(07) 38 4833
24 Hours EST

C S A C E (Atari)
(02) 529 8249 Larry O'Keefe
24 Hours Reg/VA

Cairns & District IBBS (CAD-IBBS)
(070) 51 3582
WD 1800-0800 24H WE

Canberra IBBS
(062) 58 1406
24 Hours EST

Canberra RBBS
(062) 88 8318
24 Hours EST

CCUA BBS(C-64)
(02) 599 7342
24 Hours Public

Club-80 (SYDTRUG) RTRS
(02) 332 2494 Michael Cooper
24 Hours Mem/VA

Colour Computer Link (Cocolink)
(075) 32 6340
24 Hours EST

COMM-LINK
(043) 413 135 Jeff Campbell
5-9M/F 24 Hours W/e GOSTERM

COMMBOARD 068
(068) 471 197 Gary Edwards
24 Hours

Commodore 64 BBS
(02) 664 2334 Graham Lee
24 Hours Reg/VA

Competron IBBS (COMPT-IBBS)
(07) 52 9498
WD 1700-0800/WE24HES

Computer Ventures BBS
(08) 255 9146
24 Hours CST

Computers Galore BBS
(03) 561 8479
24 Hours EST

Contact RCPM
(02) 550 1004 Steven Williams
24 Hours Mem/LVA

Dick Smith RIBM
(02) 887 2276 Steven Engel
24 Hours Public

East Ringwood RCPM
(03) 870 4623
1600-000EST Weekdays

Electronic Oracle IBBS (EO-IBBS)
(08) 260 6686
24 Hours CST

Frontier Systems RIBM
(02) 875 2606 John Stanton
24 Hours EST Public

Galacy (Apple) BBS
(02) 875 3943 Chris Nelligan
24 Hours Public

COMMUNICATIONS

Gippsland RCPM
(051) 799 2001
24 Hours EST

Goblin Sound RMAC
(02) 660 8182
Ned Whitford
24 Hours Reg/LA

HARBOURD 64
(03) 587 2504
David Harbour
24 Hours Mem/Reg/VA

Hi-Tech CBBS (HTC-BBS)
(07) 38 6872
24 Hours EST

Hisoft BBS
(03) 799 2001
24 Hours EST

Hotline
(07) 353 3718
24 Hours

Illawarra BBS
(042) 84 4354
John Simon
24 Hours

Infor-Centre BBS
(02) 344 9511
Paris Radio
24 Hours Mem/VA

Irata BBS
(02) 600 9041
Paul Sommers
M/F1800-0000 24H W/E

Keeboard TBBS
(02) 629 2230 Phillip Keegan
24 Hours Public

Mail-Bus
(051) 27 7245
24 Hours EST

Melbourne Micro Computer Club CBBS
(03) 762 5088
24 Hours EST

Melbourne Microbee User Group RCPM (MMUG-RCPM)
(03) 873 5734
24 Hours EST

Mi Computer Club RCPM
(02) 662 1686
Your Computer Mag
24 Hours Mem/VA

Micro Design Lab RCPM
(02) 663 0151
Steven Jolly
24 Hours Public

Micropro Computers RCPM (MICROP-RCPM0
(03) 568 8180
24 Hours EST

MS-RBBS TRRS
(003) 34 0911
Mike Scott
24 Hours

Multiple BBS(Multi-BBS) MULTI-BBS
(08) 255 5116
24 Hours

Newcastle Microcomputer Club RCPM
(049) 68 5385
1700-830wk24HrESTwe

Nexus Education Dept BBS NEXUS-BBS
(08)243 2477
24 Hours

Omega Line/Breskie Omen
(02) 457 8281
Geoff Arthur
24 Hours Public
(300/300 & 1200/75)

Omen II RTRS
(09) 279 8555
24Hours

Omen II RTRS
(089) 27 4454
24Hours

Omen IV RTRS
(03) 846 4034
24 Hours EST

Omen RTRS
(02) 498 2495
Ted Romer
M-F 1630-900F-M24Hrs REG/VA

Omen V RTRS OM5-RTRS
(08) 243 2477
1800-0700 Daily

Oracle TBBS
(02) 960 3641 Rowan Evans
0000-1800wd0000-0600

Outback RCPM
(089) 27 7111
24Hours

Palantir C-64 BBS
(02) 451 6576
Steve Sharp
24 Hours Public

PC Connection BBS
(03) 528 3750
2100-1800WD/24HEstWE

Perth RMPM
(09) 367 6068
24 Hours

Prophet TBBS
(02) 628 1930
Larry Lewis
24 Hours Public

Pursuit BBS
(02) 522 9507
Warren Hillsdon
24 Hours Mem/VA

RCOM BBS
(02) 667 1930
Simon Finch 24 Hours
(Requires Rterm Program)
SYDCOM'RLOM

Red CentreRCPM REDC-RCPM
(075) 32 6340
24 Hours

RUNX Unix System
(02) 48 3831/4871860
Mark Webster
24 Hours Mem/LVA
(1200/1200) (1200/75)
(300 Baud/4 Lines) (Voice)

SA CommodoreBBS SAC64-BBS
(08) 382 4631

Scorpio C-64 BBS
(02) 621 7487
Russ Morrison
24 Hours Reg/VA

Sentry BBS 9VIC 20)
(02) 428 4687
Trev Roydhouse
M/F 2100-0600 Public
Sat - Sun 2000-0600

Skull Apple ABBS
(02) 529 89750
Les Ayling
24 Hours Reg/VA

SMUG BBS
(02) 607 7584 Bob Fryer
24 Hours Reg/VA

Software Tools RCPM
(07) 378 9530
24 Hours EST

Sorcerer Computer Users ASSOC. CBBS
(03) 434 3529
24 Hours EST

Sorcerer RCPM
(02) 387 4439
John Woolner
wd 1800-0800 EST Mem/VA
OFF AIR* (Ring Back wd)
W/end 24 Hrs

Sydney PC User Group RIBM
(02) 238 9034
Geoff May
24 Hours Reg/VA

Tandy ACCESS RIBM
(02) 625 8071
24 Hours Reg/VA

Tardis RCPM
(03) 67 7760
1800-0900Wd/24hWe/Es

Tesseract RCPM
(02) 651 1404
John Hastwell-Batten
24 Hours Reg/VA

Texas Instruments (TISHUG)
(02) 560 0926
Shane Anderson
M-F 1900-0700 We24h
Reg/VA

TI BUG BBS
(07) 263 6161
9pm-6am Weekdays

Tomorrow Land's DIRECT
(02) 411 2053
John Thwaite
24 Hours Reg/VA

Tomorrowland Direct (BRIS-TLD)
(07) 394 2300
24 Hours EST

Video Connection
(03) 754 4203
Robert Kroes
24 Hours

Zela Remote TRS-80 System
(02) 627 4177
Nick Andrews
M/F24HrsW/e1900-0700
Reg/VA

User Group Grapevine

For all those poor sods who have just bought a new home computer and are wondering where to turn for help, here's your answer. There's a whole swag of User Groups around Australia. They are like clubs for people who use a specific brand or type of machine and want to swap what they know about it with others.

We have put the User Group Grapevine onto a database, so if your group is listed incorrectly - or you'd like to add your group to the listing - please advise us by mail or call (02)498 3204 between 8.00am and 11.00pm EST seven days a week.

ACT VIC-20 USERS ASSOCIATION
25 Kerferd Street,
Watson ACT 2602
(062) 412316 after 6pm

Albury/Wodonga Commodore User Group
P.O. Box 1014
Albury NSW 2640
D. Willis, Secretary

Amiga Users of the NT A.U.N.T.
C/- 4/4 Armidale Street
Stuart Park NT 5790
R. Rawinski

Ballarat C-64 Club
142 Eureka Street
Ballarat Vic 3358
(053) 331 863 Cheryl Allen
Every Sunday 9.00am

Bay Users Group
P.O. Box 308
Nelson Bay NSW 2315
(049) 811731
GOSUB

Brisbane Commodore Computer Users Group (Qld) I.
P.O.Box 274
Springwood Qld 4127
(07) 3415651 Norm Chambers, Secretary

Bull Creek Vic Ups Commodore Computer Group V-CBULLC
862 Forrest Road
Jandakot WA 6164
L. Boelan
1st & 3rd Tuesday. Willton High School

Christchurch Commodore Users' Group, Inc The C.C.U.G.
3 Paulus Terrace,
Christchurch 234 382 Tony Petre

Commodore Great Western Users Group GRTWEST
2 Bridge Street, Granville NSW 2142
(02) 637 6282 Lisa Bullivant
1st Tuesday each month
Greystanes Community Centre
Merrylands Road, Merrylands
Byte

Commodore Hornsby User Group CHUG
P.O. Box 1578
Hornsby, Northgate 2077
(02) 476 4391 Jill Rassack, Secretary
7.15pm 4th Wednesday of each month
St Leos College, Woolcott Ave, Waha
Peripheral/Line Feed

Commodore User Group (Townsville)
(09) 726454 Tony Moore
7.30pm 1st Wednesday of each month
Ignatius Park College, Computer Room

Commodore User Group A.C.T. CUGACT
P.O. Box 599
Belconnen ACT 2616
(062) 48 9527(H) John Hambley, Secretary
7.30pm 1st Monday/3rd Monday
Melba High School/Woden Library

Commodore Users Group Mackay MACK CUG
P.O. Box 422
Mackay QLD 4740
(079) 422 068 Ken Johnston
Wednesday fortnightly 7.30pm
Mackay Teachers Centre
Nelson Street

Comp-Tel (Telecom User Group)
138 Barcom Ave
Rushcutters Bay NSW 2011
(02) 231 1111 O. Davide
Mostly by telephone or when necessary by Pitt telephone exchange. Comp-Tel

Compu-Tech Users Club
P.O. Box 43
Islington NSW 2236
Geoff Rayner, Secretary
Last Tuesday each month, 7.00pm
Newcastle Technical College
Victim

Comstrad Computer Users Group
22 Wilson Street,
Caboolture Qld 4510
(075) 95 3566 Marcus Dwyer
1st/3rd Saturday each month 6-9pm
Caboolture Anglican Church Hall
Syntax

Eastern Suburbs Commodore User Group ESCUG
P.O. Box 236
Botany NSW 2019
Carol Shearman
Every 2nd Monday 8.00pm
State Emergency Services Hall,
rear 1355 Botany Street, Botany

Gold Coast Computer Club
P.O. Box 645
Palm Beach Qld 4221
(075) 562 336 Cyril White
every 2nd Tuesday 7-9pm
Elanora State School

Gosford Commodore User Group GOSCOM
P.O. Box 86
Umina Beach NSW 2257
(043) 69 3790 Andy Laming
3rd Wednesday each month 7.30pm
East Gosford Public School Library
Output

Goulbourn Commodore User Group
34 Chantry Street
Goulbourne NSW 2580
(048) 212 704 Geoff Bassingthwaight
2nd Tuesday each month 7.00pm
Southern Tablelands Education Centre

Horsham Commodore User Group HORSHCUG
P.O. Box 676
Horsham Vic 3400
(053) 824 345 Ian Rees
2nd Wednesday each month 7.30pm
Various

Katoomba Commodore User Group
10 Rosebery Street,
Wentworth Falls NSW 2782
(047) 57 1408 P. Edwards
Every 2nd Tuesday 7.30pm
Katoomba High School

USER GROUPS

Knoxcom Inc. Commodore Users Group
71 Folkstone Crescent
Ferntree Gully Vic 3158
John Williams
Every 2nd Thursday 8pm
Boronia Community Centre,
Park Crescent, Boronia

Macquarie Fields Commodore User Group
(02) 610 3685 Andrew Price
2nd & 4th Wednesday each month
Macquarie Fields Community Hall,
Fields Road, Macquarie Fields

Melbourne Commodore Computer Club Incorporated
P.O. Box 252,
Northcote 3070
John Ruddock, Secretary
7.30pm 3rd Tuesday of each month
Nunawading Civic Centre (next to Library)

Mermaid (Business) Users Group
P.O. Box 76
Mermaid Beach 4218
(075) 39 8427 Ron Perry
Fortnightly
Mermaid Computers, "Home In"
Shopping Complex, Gold Coast Hwy,
Mermaid Beach

NZ Microcomputer Club NZMICROC
P.O. Box 6210
Auckland, New Zealand
64 9 452 639 Terry Bowden
1st Wednesday each month 7.30pm
107 Hillsborough Road, Mt. Roskill
NZ Micro in Bits & Bytes Magazine

Peninsula Commodore Users Group PENCUG
C/o Red Hill Consolidated School
Flinders Rd, Red Hill Vic 3937
(059) 895 785 Luke Button
1st Wednesday 3rd Tuesday
Red Hill Consolidated School,
cnr. Arthurs Seat Rd & Flinders Rd, Red Hill

Pittsworth Microcomputer Users Society
P.O. Box 166
Pittsworth QLD 4356
David Siebuhr
1st Monday each month 4pm
Masonic Hall
Pittsworth Microcomputer Users Soc

RAAF Laverton Commodore User Group
R.A.A.F. Base, Laverton
Melbourne Vic 3027
(03) 3682457 Neville Hewlett, Secretary

Rockhampton Commodore Users Group ROCHCUG
P.O. Box 5733
Rockhampton Mail Centre Qld 4702
Kay Lanyon
1st Monday each month
Berserker Street School
RCUG Newsletter

South Australian Commodore Computer Users Group
P.O. Box 427,
North Adelaide SA 5006
(08) 263 6349 (H) Lilly Woer
7.30pm 1st Tuesday of each month
Gillies Street Primary School,
Gillies Street, Adelaide
Bits and Bytes

Southern Districts Commodore Users Group STHDIST
3 Lucille Crescent
Casula NSW 2170
(02) 602 8691 L. Toms
1st/3rd Wednesday each month 6-8pm
API Hall, Kurrajong Road, Prestons

Southport Commodore Computer Users Group S.C.C.U.G.
Merv McFarlane,Secretary
Every Monday 7pm
Labradore State Primary School,
Gordon Street Entrance

Springvale CUGVIC
10 Sheridan Court
Dingley VIC 3172
2nd Monday each month
Dingley Community Centre
Commodore 64 User Group Newsletter

Sydcom
P.O. Box 1542
Sydney NSW 2001
(02) 451 7694 Philip Dean
2nd Wednesday each month
7.00 - 9.00pm
Abraham Mott Hall, Argyle St,
Millers Point Peripheral

Tamworth C.Y.S.S.
P.O. Box 1104
Tamworth NSW 2340
(067) 665 136 Mr. Mark Nickols

Tasmanian Commodore Users Association
G.P.O. Box 673
Hobart Tas 7001

The Commodore User's Group (Victoria) Inc
P.O. Box 64
Abbotsford Vic 3067

The Happy Hackers Adventure Club ADVNTNEW
MSF 550
Toogoolawah QLD 4313
(075) 83 5119 Stuart Elflett
Postal Group
Australia Wide Adventure News

The Shepparton Commodore Computer Club
(058) 214746 Val Hutchinson
Sunday evening, 7.30pm
1st Shepparton Scout Hall,
Welsford Street, Shepparton
The Communicator

Tuggerah Lakes Commodore Users Group
125 Woolana Aveune
Budgewoi NSW 2262
(043) 907 339 Frank James
1st & 3rd Thursdays at 6.30pm
Old Primary School, Wyong
cnr. Alison Rd & Rankin St

VIC-UPS Computer User Group
P.O. Box 178
Nedlands WA 6009
(09) 332 5313 Russ Coppins
VIC-UPS News

VIC-UPS Nedlands (Inc) V-UNEDL
P.O. Box 386
Claremont WA 6010
(09) 367 1462 Norm Holtzman
2nd & 4th Saturdays each month
1.30pm - 4.30pm, Hollywood Senior High
School Smyth Road, Nedlands
Vic-Ups News

VK Commodore Users Group VKCUG
P.O. Box 168
Launceston Tas 7250
(003) 26 2401 R.K. (Bob) Richards
On amateur radio 3.570MHZ
0900 UTC Sundays

Waverley Commodore User Group
C/- 329 Springfield Road
Nunawading Vic 3131
(03) 569 8481 H. Younger
4th Thursday 7.30pm
Alvie Hall, Alvie Road, Mt. Waverley

Wollongong C-64/C128 Users Group
155 Jacaranda Ave Figtree
(042) 288580 P. Stanhope,Secretary

Yarra Valley Commodore Users Group
P.O. Box 176, Lilydale Vic 3140
(03) 725 0682 Dorothy Millard
1st Tuesday each month 8.00pm
Melba Hall
Cnr. Market & Castella Streets Lilydale.

Newsroom on your MPS-802

There's nothing worse than discovering that your hardware and software won't work together. Fortunately, there is a way around most incompatibility problems. Here is one such solution.

The following suite of programs allows owners of the MPS-802, MPS-1000, MPS-801 and 803 to use *Newsroom* as it was originally intended.

No doubt the hi-res graphics dump routines could be adapted to work with other programs.

Operation

Load and run *Newsroom* as you normally would. When you have designed a screen that is ready to be printed, be sure that your work is currently being displayed on the screen and then reset the computer.

For most this may mean shorting out pins one and three on the user port, however commercially available reset switches are available for around $10.00.

Once the computer resets, LOAD and RUN the loader program and you're away. It's all menu based, which means it is fairly easy to understand how to then get your picture onto paper. Be sure to leave the disk you save all these programs onto in the drive. Use the following guide to SAVING the included programs on your disk.

Program Titled	SAVE as
802 Newsroom Loader	LOADER
802 Hires BASIC	H.Basic
Newsroom Menu	M2
802 Newsroom	802 Newsroom
802 Clip Art	802 Clip Art
Border	Border

If you like doing a little investigative work of your own, here's a list of entry points into some of the machine language routines used.

Process	Decimal location
hires screen	49152
lores screen	49169
copy memory	49319
rotate chars	49186
(address should be in 251 and 252)	
rotate screen	49251
reverse screen	49223
normal screen	49288
error routine	49417,line no
directory	49472

Next month - four more useful 802 programs, so stay tuned. If you have difficulty entering the listings they are included on ***Australian Commodore Review Disk Magazine Number Five.***

Many thanks to ***Andrew Baines*** *for this contribution. At the age of fifteen he is certainly making a blazing entry into the programming world.*

802 Newsroom Loader

```
1 IFPEEK(49152)<>169THENLOAD"802 HIRES MCODE",8,1
5 POKE53280,0:POKE53281,0:SYS49319
10 POKE198,3:POKE631,13:POKE632,13:POKE633,13
20 PRINT"(CLR)(BLK)"
30 PRINT"(DOWN)(DOWN)POKE642,64:POKE44,64:POKE16384,0:NEW"
40 PRINT"(DOWN)(DOWN)LOAD"+CHR$(34)+"M2"+CHR$(34)+",8"
50 PRINT"(DOWN)(DOWN)(DOWN)(DOWN)RUN":PRINT"(HOME)(BLK)":NEW
```

802 Hires BASIC

```
10 I=49152
20 READ A:IF A=256 THEN 40
25 C=C+A
30 POKE I,A:I=I+1:GOTO 20
40 IFC<>65128THENPRINT"ERROR IN DATA":END
50 OPEN15,8,15,"I0"
60 OPEN3,8,1,"0:802 HIRES MCODE,P,W"
70 INPUT#15,EN,EM$,ET,ES
80 IFEN=0THEN160
90 IFEN<>63THENPRINTEN;EM$;ET;ES:GOTO300
100 PRINT"FILE EXISTS. REPLACE (Y/N)?";
110 GETA$:IFA$=""THEN110
120 PRINTA$:IFA$<>"Y"THEN300
130 PRINT#15,"S0:802 HIRES MCODE,P,W"
140 CLOSE3:CLOSE15:GOTO50
160 POKE157,128:POKE251,0:POKE252,192
170 POKE780,251:POKE781,234:POKE782,193:SYS65496
300 CLOSE3:CLOSE15:END
49152 DATA 169,8,13,24,208,141,24,208
49160 DATA 169,32,13,17,208,141,17,208
49168 DATA 96,169,247,45,24,208,141,24
49176 DATA 208,169,223,45,17,208,141,17
49184 DATA 208,96,160,7,177,251,162,0
49192 DATA 42,62,63,192,232,224,8,208
49200 DATA 247,136,16,240,160,7,185,63
49208 DATA 192,145,251,136,16,248,96,0
49216 DATA 0,0,0,0,0,0,0,169
49224 DATA 32,133,98,160,0,132,97,177
```

802 Hires BASIC *(cont)*

```
49232 DATA 97,73,255,145,97,230,97,208
49240 DATA 246,166,98,232,134,98,224,64
49248 DATA 208,237,96,169,32,133,252,160
49256 DATA 0,132,251,32,34,192,32,34
49264 DATA 192,32,34,192,165,251,105,7
49272 DATA 133,251,201,0,208,237,166,252
49280 DATA 232,134,252,224,64,208,228,96
49288 DATA 169,32,133,252,160,0,132,251
49296 DATA 32,34,192,165,251,105,7,133
49304 DATA 251,201,0,208,243,166,252,232
49312 DATA 134,252,224,64,208,234,96,169
49320 DATA 0,133,251,169,32,133,252,169
49328 DATA 0,133,253,169,96,133,254,169
49336 DATA 0,141,128,3,169,32,141,129
49344 DATA 3,174,129,3,160,0,177,253
49352 DATA 145,251,200,208,249,230,252,230
49360 DATA 254,202,208,242,160,0,177,251
49368 DATA 145,253,200,56,204,128,3,144
49376 DATA 245,96,138,48,3,76,235,192
49384 DATA 76,116,164,234,165,251,133,20
49392 DATA 165,252,133,21,76,163,168,234
49400 DATA 0,0,0,0,0,0,32,253
49408 DATA 174,32,138,173,32,247,183,96
49416 DATA 234,169,226,141,0,3,169,192
49424 DATA 141,1,3,32,254,192,165,20
49432 DATA 133,251,165,21,133,252,96,0
49440 DATA 162,251,160,0,32,212,187,162
49448 DATA 0,134,254,161,251,240,2,133
49456 DATA 254,232,224,7,208,245,169,0
49464 DATA 160,253,32,162,187,96,122,132
49472 DATA 169,8,133,75,169,0,133,104
49480 DATA 169,128,133,105,32,68,229,169
49488 DATA 36,133,2,169,1,133,183,133
49496 DATA 184,169,96,162,8,133,185,134
49504 DATA 186,169,2,162,0,133,187,134
49512 DATA 188,32,213,243,165,75,32,9
49520 DATA 237,165,185,32,199,237,169,0
49528 DATA 133,144,160,3,132,183,32,19
49536 DATA 238,133,195,32,19,238,133,196
49544 DATA 164,144,208,87,164,183,136,208
49552 DATA 235,162,6,169,32,32,210,255
49560 DATA 202,208,250,169,1,141,134,2
49568 DATA 166,195,165,196,32,205,189,169
49576 DATA 14,141,134,2,169,32,32,22
49584 DATA 231,32,19,238,166,144,208,43
49592 DATA 201,0,240,6,32,22,231,76
49600 DATA 177,193,32,237,246,240,28,32
49608 DATA 228,255,240,13,201,32,208,9
49616 DATA 32,228,255,240,251,201,3,240
49624 DATA 10,169,13,32,22,231,160,2
49632 DATA 76,124,193,32,66,246,32,239
49640 DATA 237,96,169,0,256
```

Newsroom Menu

```
0 SYS49417,500:POKE896,0
1 IFPEEK(896)=1THENLOADF$,8,1
6 PRINT"(CLR)(WHT)(DOWN)(RVS)                                    "
8 PRINT"(RVS)   THE NEWSROOM 802 GRAPHICS PROGRAM   "
10 PRINT"(RVS)                                      "
12 PRINT"(DOWN)(DOWN)(RGHT)(RGHT)(RGHT)PLEASE MAKE YOUR SELECTION"
14 PRINT"(DOWN)1.SAVE SCREEN"
16 PRINT"(DOWN)2.LOAD SCREEN"
17 PRINT"(DOWN)3.PRINT SCREEN"
20 PRINT"(DOWN)4.VIEW SCREEN"
22 PRINT"(DOWN)5.VIEW DIRECTORY"
23 PRINT"(DOWN)6.PRINT BORDER"
25 GETA$:IFA$=""THEN25
30 IFA$="1"THEN50
32 IFA$="2"THEN400
33 IFA$="5"THEN1000
34 IFA$="3"THEN150
37 IFA$="6"THENF$="BORDER":GOTO250
38 IFA$="4"THEN320
40 GOTO25
50 INPUT"(CLR)FILENAME ";F$:IFF$=""THENRUN
55 OPEN15,8,15,"I0"
60 OPEN3,8,1,F$+",P,W"
65 INPUT#15,EN,EM$,ET,ES
70 IFEN=0THEN110
80 IFEN<>63THENPRINT"(CLR)"EN;EM$;ET;ES:GETA$:IFA$=""THEN80
90 PRINT"FILE EXISTS. REPLACE IT?"
95 GETA$:IFA$=""THEN95
96 IFA$="Y"THEN100
97 IFA$="N"THEN150
98 GOTO95
100 PRINT#15,"S0:"+F$+",P,W"
110 POKE157,128:POKE251,0:POKE252,32:POKE780,251:POKE781,72:POKE782,63
120 SYS65496
130 CLOSE3:CLOSE15:RUN
150 PRINT"(CLR)IS THIS SCREEN A:"
160 PRINT"          1. NEWSROOM CLIP ART SCREEN."
170 PRINT"          2. NEWSROOM PANEL/PHOTO."
180 GETA$:IFA$=""THEN180
190 IFA$="1"THENF$="802 CLIP ART":GOTO250
200 IFA$<>"2"THEN180
210 F$="802 NEWSROOM":GOTO250
220 PRINT"(CLR)(DOWN)(DOWN)(DOWN)INSERT THE CORRECT DISK
    PRESS RETURN"
230 GETA$:IFA$<>CHR$(13)THEN230
240 RETURN
250 GOSUB220
255 PRINT"(CLR)(BLK)(DOWN)(DOWN)(DOWN)LOAD"+CHR$(34)+F$+CHR$(34)+",8"
260 PRINT"(DOWN)(DOWN)(DOWN)(DOWN)RUN"
270 POKE198,2:POKE631,13:POKE632,13
280 PRINT"(HOME)(BLK)":NEW
290 IFA$<>"3"THEN180
```

Newsroom Menu *(cont)*

```
320 PRINT"(CLR)":SYS49152
330 GETA$:IFA$=""THEN330
340 SYS49169:RUN
400 INPUT"(CLR)FILENAME: ";F$:IFF$=""THENRUN
410 POKE896,1:GOTO1
500 OPEN15,8,15
510 INPUT#15,EN,EM$,ES,ET
520 CLOSE15
530 PRINT"(CLR)(DOWN)(DOWN)DISK ERROR:"
540 PRINT"(DOWN)(DOWN)"EN","EM$","ES","ET
545 IFEN=62THENPRINT"(DOWN)(DOWN)INSERT THE
    CORRECT DISK PLEASE"
547 GETA$:IFA$=""THEN547
550 RUN
1000 SYS49472
1010 GETA$:IFA$<>""THENRUN
1020 GOTO1010
```

802 Newsroom

```
1 SYS49417,500
2 A=A+1:IFA=1THEN400
3 IFA=1THENINPUT"FILENAME:";F$:LOADF$,8,1
4 SYS49152:PRINT"(CLR)":GOTO600
6 FI=0
10 OPEN6,4,6:PRINT#6,CHR$(21)
15 J=8192+40
20 OPEN5,4,5
25 OPEN4,4
27 REM START OF PRINTING PROCESS
30 FORI=7TO0STEP-1:A=PEEK(J+I):A$=A$+CHR$(A):NEXT
40 PRINT#5,A$
50 A$=""
60 B$=B$+CHR$(32)
70 PRINT#4,B$CHR$(254)CHR$(141);
75 J=J+8:V=V+1
77 IFV=29THENV=0:FI=FI+1:J=J+88:B$=N$:PRINT#4,
   CHR$(10)CHR$(141);
78 IFFI=21THEN90
80 GOTO27
90 SYS49288:SYS49223
91 B$=N$:PRINT#4,B$TT$
99 CLOSE5
100 CLOSE4:CLOSE6:SYS49169:RUN
300 INPUT"(DOWN)PRINT IN (0-48) FROM BORDER";BD
320 FORI=1TOBD:N$=N$+" ":NEXT
330 B$=N$
340 RETURN
400 POKE53280,0:POKE53281,0:PRINT"(CLR)(WHT)"
410 PRINT"(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)
   (RGHT)(RGHT)(RVS)                    "
420 PRINT"(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RVS)
    802 PANEL / PHOTO DUMP "
430 PRINT"(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RVS)
                          "
445 PRINT"(DOWN)(DOWN) 802 PANEL DUMP TAKES AROUND 2:30 TO RUN
    AND ASSUMES YOU HAVE ";
450 PRINT"PAPER IN YOUR  PRINTER."
460 PRINT"(DOWN)(DOWN)HIT [F1] TO RETURN TO MAIN MENU.
        HIT [SPACE] TO CONTINUE."
470 GETA$:IFA$<>" "ANDA$<>"(F1)"THEN470
475 IFA$="(F1)"THENLOAD"M2",8
485 GOSUB300
486 PRINT"(CLR)TITLE OF PICTURE (WILL PRINT AT THE
       BOTTOM OF THE PICTURE) "
487 PRINT"(DOWN)PRESS [RETURN] IF YOU DON'T WANT A
     TITLETO BE PRINTED":INPUTTT$
488 INPUT"LOAD SCREEN (Y/N)";VB$
489 IFVB$="Y"THENPRINT"(CLR)":GOTO3
490 IFVB$<>"N"THENPRINT"(UP)                          ";:GOTO488
492 GOTO4
500 OPEN15,8,15
510 INPUT#15,EN,EM$,ES,ET
520 CLOSE15
530 PRINT"(CLR)(DOWN)(DOWN)DISK ERROR:"
540 PRINT"(DOWN)(DOWN)"EN","EM$","ES","ET
545 IFEN=62THENPRINT"(DOWN)(DOWN)INSERT THE CORRECT DISK PLEASE"
547 GETA$:IFA$=""THEN547
550 RUN
600 J=8192+320-7*8
605 FORI=0TO7:P=PEEK(J+I):P=(POR1):POKEJ+I,P:NEXT
610 J=J+320:IFJ>16192-1*320THEN630
620 GOTO605
630 SYS49223:SYS49251
640 GOTO6
```

802 Clip Art

```
1 SYS49417,500
2 A=A+1:IFA=1THEN400
3 IFA=1THENINPUT"FILENAME:";F$:LOADF$,8,1
4 SYS49152:PRINT"(CLR)":GOTO600
6 FI=0
10 OPEN6,4,6:PRINT#6,CHR$(21)
15 J=8192+40
20 OPEN5,4,5
25 OPEN4,4
27 FORI=7TO0STEP-1:A=PEEK(J+I):A$=A$+CHR$(A):NEXT
40 PRINT#5,A$
50 A$=""
60 B$=B$+CHR$(32)
70 PRINT#4,B$CHR$(254)CHR$(141);
75 J=J+8:V=V+1
```

802 Clip Art *(cont)*

```
77 IFV=31THENV=0:FI=FI+1:J=J+72:B$=N$:PRINT#4,CHR$(10)CHR$(141);
78 IFFI=24THEN90
80 GOTO27
90 SYS49288:SYS49223
91 B$=N$:PRINT#4,B$TT$
99 CLOSE5
100 CLOSE4:CLOSE6:SYS49169:RUN
300 INPUT"(DOWN)PRINT IN (0-48) FROM BORDER";BD
320 FORI=1TOBD:N$=N$+" ":NEXT
330 B$=N$
340 RETURN
400 POKE53280,0:POKE53281,0:PRINT"(CLR)(WHT)"
410 PRINT"(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RVS)                              "
420 PRINT"(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RVS) 802 NEWSROOM CLIP ART DUMP "
430 PRINT"(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RVS)                              "
445 PRINT"(DOWN)(DOWN) 802 CLIP ART DUMP TAKES AROUND 2:30 TO RUN AND ASSUMES YOU HAVE ";
450 PRINT"PAPER IN YOUR  PRINTER."
460 PRINT"(DOWN)(DOWN)HIT [F1] TO RETURN TO MAIN MENU.       HIT [SPACE] TO CONTINUE."
470 GETA$:IFA$<>" "ANDA$<>"(F1)"THEN470
475 IFA$="(F1)"THENLOAD"M2",8
485 GOSUB300
486 PRINT"(CLR)TITLE OF PICTURE (WILL PRINT AT THE     BOTTOM OF THE PICTURE) "
487 PRINT"(DOWN)PRESS [RETURN] IF YOU DON'T WANT A TITLETO BE PRINTED":INPUTTT$
488 INPUT"LOAD SCREEN (Y/N)";VB$
489 IFVB$="Y"THENPRINT"(CLR)":GOTO3
490 IFVB$<>"N"THENPRINT"(UP)                          ";:GOTO488
492 GOTO4
500 OPEN15,8,15
510 INPUT#15,EN,EM$,ES,ET
520 CLOSE15
530 PRINT"(CLR)(DOWN)(DOWN)DISK ERROR:"
540 PRINT"(DOWN)(DOWN)"EN","EM$","ES","ET
545 IFEN=62THENPRINT"(DOWN)(DOWN)INSERT THE CORRECT DISK PLEASE"
547 GETA$:IFA$=""THEN547
550 RUN
600 J=8192+320-5*8
605 FORI=0TO7:P=PEEK(J+I):P=(POR7):POKEJ+I,P:NEXT
610 J=J+320:IFJ>16192-1*320THEN630
620 GOTO605
630 SYS49223:SYS49251
640 GOTO6
```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Each game is always slightly different and can be solved by many different routes and strategies.

Game is available for $24.95 from:

Gary McCleary Software
PO Box 24,
Emu Plains NSW 2750.

Border

```
0 SYS49417,500
5 POKE53280,0:POKE53281,0
10 OPEN4,4:OPEN6,4,6:PRINT#6,CHR$(21):CLOSE6
11 PRINT"(CLR)(DOWN)(DOWN)(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RVS)
12 PRINT"(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RVS)  THE 802 BORDER PROGRAM  "
13 PRINT"(RGHT)(RGHT)(RGHT)(RGHT)(RGHT)(RVS)                        "
14 GOSUB100
15 INPUT"(DOWN)(DOWN)(DOWN)(DOWN)   CHARACTER FOR BORDER ";CH$
16 IFCH$=""THENRUN
17 CH$=LEFT$(CH$,1)
18 FORI=1TO79:D$=D$+CH$:NEXT
20 INPUT"(DOWN)(DOWN)(DOWN)(DOWN)   A4 OR PRINTER PAPER SIZE (A/P)";S$
21 IFS$=""THENRUN
23 IFS$="A"THENL=110:GOTO30
25 IFS$="P"THENL=100:GOTO30
27 RUN
30 PRINT#4,D$
40 FORI=1TOL
50 PRINT#4,CH$"                                    ";
60 PRINT#4,"                                    "CH$
70 NEXT
80 PRINT#4,D$
90 RUN
100 PRINT"(DOWN)(DOWN)(DOWN)     [←] TO RETURN TO MENU"
110 PRINT"(RGHT)    [SPACE] TO CONTINUE"
120 GETA$:IFA$<>" "ANDA$<>"←"THEN120
130 IFA$=" "THENRETURN
220 PRINT"(CLR)(DOWN)(DOWN)(DOWN)INSERT THE CORRECT DISK...PRESS RETURN"
230 GETA$:IFA$<>CHR$(13)THEN230
240 RETURN
250 GOSUB220
255 PRINT"(CLR)(BLK)(DOWN)(DOWN)(DOWN)LOAD"+CHR$(34)+"M2"+CHR$(34)+",8"
260 PRINT"(DOWN)(DOWN)(DOWN)(DOWN)RUN"
270 POKE198,2:POKE631,13:POKE632,13
280 PRINT"(HOME)(BLK)":NEW
500 OPEN15,8,15
510 INPUT#15,EN,EM$,ES,ET
520 CLOSE15
530 PRINT"(CLR)(DOWN)(DOWN)DISK ERROR:"
540 PRINT"(DOWN)(DOWN)"EN","EM$","ES","ET
545 IFEN=62THENPRINT"(DOWN)(DOWN)INSERT THE CORRECT DISK PLEASE"
547 GETA$:IFA$=""THEN547
550 RUN
```

Dealer

UNITED COMPUTERS: 991 Stanley St, East Brisbane 4169
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Commodore 64/128

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A must for any student of mathemastics at high school or university level.
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* Is this artificial intelligence on the Commodore 64?

3 in 1 offer includes all three programs on one disk for $24 95 from
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Directory

Fast line deletion

Here's a short cut to deleting blocks of program lines on the C64. Execute a POKE 774,0 to modify your computer's list routine. The modified routine lists numbers only, without the accompanying program material. After the POKE, just LIST the line you want to delete, then press RETURN over each of the numbers.

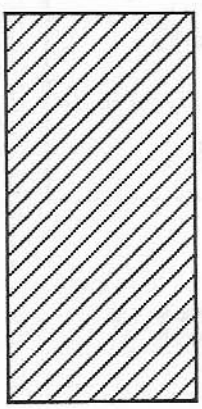
POKE 774,26 to restore your computer to normal, then LIST your program to verify that the deleted lines are gone.

Are you tired of typing ,8 every time you want to use your disk drive? Would you spend five minutes to get permanent relief? If so, type this little program, which changes the default device number from 1 to 8.

Be sure to save it before you use it the first time, since using it erases it!

Pressing STOP/RESTORE will disable the utility, while SYS679 will bring it back to life.

Replace words in brackets by functions e.g. (down) means crsr down.



```
 10  PRINT"(clear,down,space 5) C= DISK DEFAULT"
 20 FORJ=679 TO 716:READ K:POKE J,K:CS=CS+K:
    :NEXT  :IF  CS<>4119  THEN  PRINT"BAD DATA":STOP
 25  PRINT"(down)DELETE LINE 25, THEN SAVE THE PROGRAM"
 30 SYS 679:NEW
 40 DATA 169,002,141,049,003,141,051,003
 50 DATA 169,186,141,048,003,169,197,141
 60 DATA 050,003,096,169,008,133,186,169
 70 DATA 000,133,010,076,165,244,169,008
 80 DATA 133,186,076,237,245,010
 90 rem disk default by Richard Penn
100 POKE53280,11:POKE53281,11:PRINT"(clear)"
110 PRINT"(yellow right 4) FAST FORMAT V1.0 BY BILL BREMNER"
120 PRINT"(right 4----------------------------"
130 PRINT"(down,spc 4) 45 SECONDS-FULL VERIFY"
140 PRINT"(spc7)-TAIL GAP CALCULATION"
150 INPUT"down2,spc4) DISK NAME:";NA$
160 INPUT"(down,spc6) DISK ID:";ID$
170 OPEN 15,8,15:HI=5:FOR LO=0 TO 3
180 C$="M-W"+CHR$(LO*26)+CHR$(HI)+CHR$(26)
190 FOR B=1 TO 26:READ BY:C$=C$+CHR$(BY):NEXT
200 PRINT#15,C$:NEXT
210 PRINT#15,"M-W"+CHR$(7)+CHR$(28)+CHR$(1)+CHR$(32)
220 PRINT#15,"UC:"+NA$+","+ID$
230 PRINT#15,"M-W"+CHR$(7)+CHR$(28)+CHR$(1)+CHR$(58)
240 CLOSE 15:END
250 DATA 160,68,185,199,250,153,0,4
260 DATA 136,16,247,160,100,185,25,5
270 DATA 153,69,4,136,16,247,76,91
280 DATA 4,160,3,165,34,217,87,4
290 DATA 240,6,136,16,248,76,54,252
300 DATA 76,12,251,31,25,18,1
310 DATA 169,11,141,42,2,169,0,141
320 DATA 1,2,32,238,193,172,123,2,185
330 DATA 0,2,133,18,185,1,2,133
340 DATA 19,169,1,133,128,169,1,32
350 DATA 211,214,169,224,133,1,165,1
360 DATA 48,252,32,228,200,238,122,2
370 DATA 238,122,2,76,64,238,234,234,234
```

1541 - Fast Format

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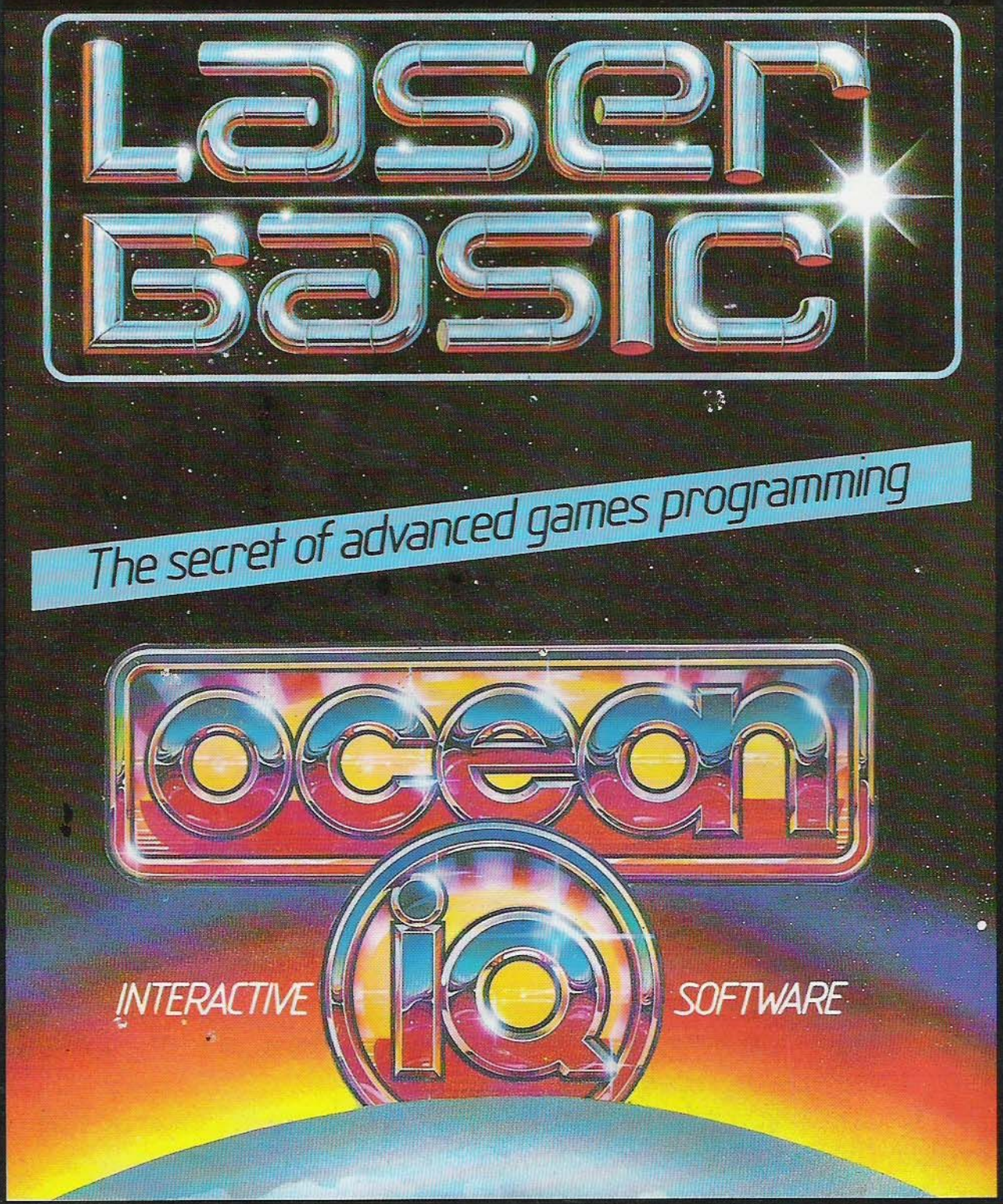

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